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Armed Services Vocational Aptitude Battery (ASVAB) scores and final course grades from over 8,000 high school students at 50 schools were gathered to determine the validity of ASVAB Form 14 for the prediction of high school course grades. Grades were collected for courses taken during the academic year in which students were tested on the ASVAB (1984-85) and for the following year. Eleven ASVAB high school composites were used as predictors of final course grades. The 10 ASVAB subtests were also taken together to predict final course grades using multiple regression techniques. Samples of sufficient size for analysis were available in 21 different academic areas. Overall, 112 course-by-year combinations were examined for evidence of validity. Several of the ASVAB high school composites were effective in predicting high school course grades. The three best composites were Business and Clerical, Mathematics, and the Armed Forces Qualification Test. Prediction was generally better in academic courses than in vocational courses, although there were exceptions. Validity coefficients relating predictor composite scores to final course grades ranged from insignificant values to approximately .67. The median value of the coefficient associated with the most effective predictor in each analysis was approximately .40. (Contains 18 tables and 3 appendixes of statistics and coefficients, an additional 133 tables, and 15 references.) (Author)

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HUMAN RESOURCES

ARMED SERVICES VOCATIONAL APTITUDE BATTERY (ASVAB): VALIDITY OF ASVAB FORM 14 FOR THE PREDICTION OF HIGH SCHOOL COURSE GRADES

Benjamin A. Fairbank
John R. Welsh

Operational Technologies Corporation
5825 Callaghan Road, Suite 225
San Antonio, Texas 78228

Linda L. Sawin

MANPOWER AND PERSONNEL DIVISION
Brooks Air Force Base, Texas 78235-5601

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Benjamin A. Fairbank
John R. Welsh
Linda L. Sawin

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
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5825 Callaghan Road, Suite 225
San Antonio, Texas 78228

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SUMMARY

This present effort investigated the short- and long-interval validity of the Armed Services Vocational Aptitude Battery (ASVAB) Form 14 for prediction of high school course grades. Grades for more than 20 different high school courses for a sample of over 8,000 high school students from 50 high schools throughout the nation were used to analyze the predictive validity of 11 composites formed from the ASVAB.

Students in the sample used for these validity analyses were grouped by the Academic Year (AY) in which they obtained the course grades analyzed (AY 1984-85, or AY 1985-86); by grade level; and by course. The ASVAB was administered in the 1984-85 school year. Separate validities for each of the resultant groups were computed for the criterion of final course grade, for each of the predictors -- the 11 ASVAB-based composites -- and a multiple regression predictor using all 10 ASVAB subtests.

Results of the validity analyses were discussed in terms of three broad course content areas: General Academic courses, Business and Clerical courses, and Trade and Specialty courses.

Results indicated that the Business and Clerical, the Mathematics, and the Armed Forces Qualification Test (AFQT) composites were the most effective predictors of high school course grades for this sample. The most effective composites predicted General Academic final course grades with mean validity coefficients ($\underline{r}$) of approximately .43. The prediction was slightly less effective for Business and Clerical final course grades, mean $\underline{r} = 40$; it was slightly less effective still for Trade and Specialty courses, mean $\underline{r} = .38$. The results provided clear evidence of the validity of the ASVAB in predicting high school course grades.

PREFACE

This research and development effort was conducted under contract No. F41689-87-D-0012/5006, Task 6, Validity and Equity of the High School ASVAB.

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ARMED SERVICES VOCATIONAL APTITUDE BATTERY (ASVAB): THE VALIDITY OF THE ASVAB FORM 14 FOR THE PREDICTION OF HIGH SCHOOL COURSE GRADES

I. INTRODUCTION AND BACKGROUND

The Armed Services Vocational Aptitude Battery (ASVAB) is a group-administered, multiple-aptitude battery that has been used since 1976 for determining the enlistment aptitudes of applicants for the U. S. Armed Forces. Since the mid-1960's, the Department of Defense (DoD) has conducted a student testing program in which the ASVAB is administered free of charge in the nation's high schools.

The student testing program serves a dual purpose. Military recruiters use the students' test scores from ASVAB administrations to identify potential recruits. ASVAB test scores are used in career exploration by high school counselors and students.

The establishment of the validity of the ASVAB in the prediction of high school course grades fulfills the requirement for one of the types of validity studies that may need to be accomplished to establish and increase the usefulness of ASVAB test scores for career exploration. There has been considerable research establishing the validity of ASVAB scores for the prediction of success in entry-level military occupational training courses using operational military selection and classification composites (Booth-Kewley, Foley, & Swanson, 1984; Maier & Truss, 1985; McLaughlin, Rossmeissl, Wise, Brandt, & Wang, 1984; Wilbourn, Valentine, & Ree, 1984). There have been few studies which examine the validity of the ASVAB high school composites for predicting entry-level military occupational training success.

Maier and Truss (1984) examined the validity of the high school composites for the prediction of success in 34 entry-level Marine Corps technical training courses. Using final course grade as the criterion, they found that the average validity coefficients for the sample of over 16,000 Marine Corps recruits were between .57 for the Mechanical and Crafts composite and the Verbal composite, and .61 for the Health, Social, and Technology composite as well as the Electronics and Electrical composite. Validity coefficients for the Technical and the Perceptual Speed composites were .52 and .45, respectively.

Results of a study by Hanser, Arabian, and Martin (1984), as reported by Hunter, Crosson, and Friedman (1985), indicate that the validities of the high school composites ranged from a low of .38 for the Army General Maintenance occupations to a high of .62 for the Army Clerical occupation. These validities are for Army recruits in broad occupational areas.

The validity of the ASVAB Form 14 high school composites and subtests for the prediction of success in civilian occupations was indirectly addressed by Armstrong, Chalupsky, McLaughlin, and Daldorf (1988). Those authors used Army data from a major, long-term Army research effort to explore the validity of aptitude measures, including the ASVAB, for the prediction of job performance. The job performance criteria in that effort were scores on the Skill Qualification Test (SQT), a two-part test comprised of a written test of job knowledge and a hands-on performance test. Civilian supervisors in the 12 selected occupations rated task analyses of selected Army occupations in order to obtain estimates of the overlap or task similarity between the 12 civilian occupations and selected Army occupational specialties for which validity data were available. Sufficient similarity was found in 9 of the 12 civilian occupations to generalize validity from military to civilian occupations. Results from that study indicated that the estimated validity for the 9 matching civilian occupations ranged between .51 for Medical Specialists (matched to a civilian occupation of licensed practical nurse) and .74 for Operator, Heavy Wheeled Vehicle (matched to a civilian occupation of diesel mechanic).

Armstrong et al. (1988) used the civilian incumbents' ASVAB aptitude scores and the known predictive validity relationship between ASVAB and job performance criteria in the military to estimate the validity of the subtests and composites for the civilian occupations. Clemans' Lambda (Clemans, 1958) was used to estimate the correlation coefficients for the original 12 civilian occupations; the values which were found ranged from a low of .13 for accountants and clerks to a high of .73 for diesel mechanics. These validities are of the same order of magnitude as the validities of the ASVAB for the prediction of Army job performance measures (McLaughlin et al., 1984). These validities are based on the prediction of entry-level training success in military jobs or occupations, rather than on measures of job performance.

Studies by Hunter (1983) and Hunter et al. (1985) are of a theoretical nature and address the construct validity of the ASVAB. These studies indicate that the predictive validity of the ASVAB should generalize to civilian occupations because the ASVAB is a better measure of 'g' than is the General Aptitude Test Battery (GATB) (Hunter et al., 1985),

and the 'g' factor has been shown to be a predictor of job success. The GATB has also been shown to be a valid predictor of civilian occupational success. Because the ASVAB measures many of the same cognitive abilities as the GATB, with the exception of perceptual ability (Hunter et al., 1985), it is expected that both batteries should predict success in a wide range of jobs.

Although such validity information is useful in the high school counseling situation, there has been little validity information relating scores on ASVAB high school composites to high school academic success. Such information would expand the usefulness of ASVAB high school composite scores for career exploration and academic planning or counseling in the high school environment. To date, there are no published studies documenting the validity of the ASVAB high school composites for the prediction of high school course grades. The purpose of the present research is to conduct a validation of the ASVAB Form 14 composites for the prediction of high school course grades.

II. METHOD

Subjects

Subjects for this research were 8,390 high school students tested on ASVAB Form 14 during academic year 1984-85 and for whom academic year 1984-85 and 1985-1986 course grades were available. The sample was 52% female (n = 4,368), 67% white (n = 5,650), 16% black (n = 1,343), and 13% Hispanic (n = 1,096). The sample members were 30% freshmen, 30% sophomores, 22% juniors, and 18% seniors at the time of ASVAB testing.

Measures

ASVAB Form 14 is a group-administered, paper-and-pencil, multiple-aptitude battery. The battery contains 10 subtests: eight power subtests and two speeded subtests. The content of each subtest, the number of items, and the time limits allowed for administration are shown in Table 1.

Table 1. ASVAB Form 14 Subtest Title, Content, Number of Items, and Test Time

Subtest	Content	Number of items	Test time (mins)
General Science (GS)	Knowledge of the physical and biological sciences	25	11
Arithmetic Reasoning (AR)	Word problems emphasizing mathematical reasoning rather than mathematical knowledge	30	36
Word Knowledge (WK)	Understanding the meaning of words; i.e., vocabulary	35	11
Paragraph Comprehension (PC)	Presentation of short paragraphs followed by one or more multiple-choice items	15	13
Numerical Operations (NO)	A speeded test of four arithmetic operations; i.e., addition, subtraction, multiplication and division	50	3
Coding Speed (CS)	A speeded test of matching words and six-digit numbers	84	7
Auto Shop Information (AS)	Knowledge of auto mechanics, shop practices and tool functions in verbal and pictorial items	25	11
Mathematics Knowledge (MK)	Knowledge of algebra, geometry, and fractions	25	24

Table 1. (Concluded)

Subtest	Content	Number of items	Test time (mins)
Mechanical Comprehension (MC)	Understanding mechanical principles such as gears, levers, pulleys and hydraulics in verbal and pictorial items	25	19
Electronics Information (EI)	Knowledge of electrical and electronic principles in verbal and pictorial items	20	9
Total		334	144

Ten composites were constructed from the subtest standard scores (see Table 2). The Verbal, Mathematics, Perceptual Speed, and Technical composites were developed using results from factor analysis. The Academic Ability composite, a combination of subtests from the Verbal and Mathematics composites, is used as an indicator of general scholastic ability. The Mechanical and Crafts, the Business and Clerical, the Electronics and Electrical, and the Health, Social, and Technology composites were derived through analysis of validity studies involving prediction of success in military technical training programs. The composite known as the Armed Forces Qualification Test (AFQT) is used by all the Services to select enlisted personnel. The General composite (Ree & Earles, 1990), an experimental measure of general ability, is computed by using the weights obtained on the first factor of a principal components analysis of an intercorrelation matrix of the ASVAB subtests. The weights are shown in Table 3.

Table 2. ASVAB Composite Construction

ASVAB composites	ASVAB subtests
High School Composites:	
Academic Ability (AA)	AR + VE (VE = WK + PC)
Verbal (Verb)	WK + PC + GS
Mathematics (Math)	AR + MK
Mechanical and Crafts (M & C)	A + AS + MC + EI
Business and Clerical (B & C)	VE + CS + MK
Electronics and Electrical (E & E)	GS + AR + MK + EI
Health, Social, and Technology (HS & T)	AR + VE + MC
AFQT Selector Composite (AFQT)	AR + MK + 2VE
Perceptual Speed Composite (PS)	NO + CS
Technical Composite (Tech)	AS + MC + EI
General Composite (Gen)	GS + AR + WK + PC + NO + CS + AS + MK + MC + EI[a]

[a]The General Composite is the sum of all the ASVAB subtest standard scores which have been multiplied by their corresponding factor weight.

Table 3. Component Weights for ASVAB General Composite Score

Subtest	Weight
General Science	.13808
Word Knowledge	.13736
Arithmetic Reasoning	.13715
Paragraph Comprehension	.12778
Numerical Operations	.11291
Coding Speed	.09958
Mechanical Comprehension	.12448
Mathematics Knowledge	.12965
Auto and Shop Information	.10878
Electronics Information	.12857

Note. These are the weights for ASVAB subtests in standard score form (z-scores). As ASVAB subtests are reported in 50-10 standard scores, these weights may be used, recognizing that the metric of the scores is identical when 50 is subtracted from each and when the standard deviation is divided by factor of 10.

Seven of the composites are the current high school composites: Academic Ability; Verbal; Mathematics; Mechanical and Crafts; Business and Clerical; Electronics and Electrical; and Health, Social, and Technology.

Criterion

The criterion for each analysis was final course grade. Thirty-nine representative high school courses were identified. These courses fell within one of three general categories: academic, business and clerical, and trade and specialty. Course grades used were A, B, C, D, and F, and were given the numeric values of 4, 3, 2, 1, and 0, respectively. Two years of grades were obtained: one for the school year of ASVAB testing and the other for the school year immediately following ASVAB testing.

Procedure

ASVAB Form 14 scores, student name, and the name and address of the high school the student attended at the time of ASVAB testing were obtained from the United States Military Entrance Processing Command (USMEPCOM). Machine-scoreable answer sheets containing individual students' names and the 39 course titles were sent to school guidance counselors who had agreed to provide the students' final course grades. Counselors received $1.00 for each completed and returned form as an incentive to provide data. Completed forms were optically scanned and the resulting data files merged with files containing the students' ASVAB scores.

Analyses

Final course grade was regressed on the 11 composites individually and on the 10 subtests jointly to form a regression-weighted composite. Thus, for each course grade there were 11 bivariate regressions and one multivariate regression in which the 10 subtests were forced into the analysis. Expected cross-validation values were estimated for all correlations using Stein's formula (cited in Kennedy, 1988; see also Appendix C). Analyses were

restricted to the 112 courses having 100 or more students. All analyses were conducted within academic year and across sex and ethnicity. Separate analyses were conducted for course grades received the year of ASVAB testing (called short-interval validity in this report) and for grades received the year following testing (called long-interval validity). There were seven groups: individuals who took the ASVAB as freshmen and had course grades for academic years 1984-85 and 1985-86, individuals who took the ASVAB as sophomores and had course grades for academic years 1984-85 and 1985-86, individuals who took the ASVAB as juniors and had course grades for academic years 1984-85 and 1985-86, and individuals who took the ASVAB as seniors and had course grades only for academic year 1984-85.

III. RESULTS

The results of the analyses for each course are summarized in Appendix A, Tables A-1 to A-112. The tables contain the predictor and criterion mean and standard deviation, the correlation (r), the variance accounted for (r^2), Stein's cross-validation expectancy operator (r^2 cor), the adjusted squared correlation (r^2 adj) (see Appendix C for discussion of r^2 cor and r^2 adj), the standard error of estimate (SE estimate), the slope, the intercept, and the F-ratio (F). The b-weights for the regression-weighted composite for each course are shown in Appendix B, Tables B-1 to B-21.

General Academic Courses

English

Details of the validity analyses for English courses are found in Appendix A, Tables A-1 to A-7. Tables 4 through 8 summarize the validity data for general academic courses, which include English, Social Sciences, Foreign Languages, Mathematics, and Natural Sciences. The composite validities shown in Table 4 for English are presented by the grade in which the ASVAB was administered and by the academic year in which the course was taken. The short-interval validities represent validities obtained for academic year 1984-85, whereas the long-interval validities represent those obtained for academic year 1985-86. All validities are significant at the .01 Type I error rate unless otherwise indicated in the tables.

Table 4. Summary of Validity Coefficients for English I-IV

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
AA	43	44	39	38	39	40	35
Verb	41	44	37	35	37	39	34
Math	44	45	40	42	39	40	35
M&C	31	29	18	25	26	25	15
B&C	48	51	43	39	42	42	39
E&E	42	44	35	37	37	37	32
HS&T	41	41	34	36	36	37	29
AFQT	46	48	42	41	41	43	37
PS	31	34	24	21	26	21	24
Tech	24	22	10	17	19	20	07
Gen	45	46	36	36	39	39	32
All	51	55	49	45	45	47	45
N	2,498	2,391	1,813	1,349	2,051	2,021	1,506

Note. The decimal points have been omitted from validity coefficients.

[a]AA = Academic Ability.
Verb = Verbal.
Math = Mathematics.
M&C = Mechanical and Crafts.
B&C = Business and Clerical.
E&E = Electronics and Electrical.
HS&T = Health, Social and Technology.
AFQT = AFQT Selector.
PS = Perceptual Speed.
Tech = Technical.
Gen = General Composite.
All = Best linear combination of all 10 subtests.

The best single predictor of English grades is the Business and Clerical composite. For short-interval validity, the best prediction is for sophomores, r = .51, a relation which indicates that the predictor accounts for 26% of the variance in course grades. For long-interval validity, the Business and Clerical composite predicted better for freshmen and sophomores (r = .42 for both) than for juniors (r = .39). The Business and Clerical composite's effectiveness is not very much greater than that of the AFQT and the Mathematics composite, but it is much more effective than the Technical and the Mechanical and Crafts composites. Other composites generally are intermediate in their predictive effectiveness.

The multiple correlation coefficients found when using all of the ASVAB subtests to predict English scores are higher than any of the correlations between composites and course grades. That is the case because the use of all of the subtests must yield better prediction than a subset of the same subtests. Nevertheless, the correlations associated with the best-predicting composites are not very much lower than those found with the multiple predictors. For example, for freshmen in the case of short-interval validity, the

correlation between the Business and Clerical composite and English grades is .48, while that between the optimum combination of all subtests and English grades is .51. Thus, some of the composites are remarkably effective in the prediction of grades.

All of the predictions based on the composites in Table 4 are significant at or beyond the .01 level. English grades appear to be well predicted by a variety of predictors, presumably because the various composites all measure an unidentified component which contributes to success in English.

Social Sciences

Appendix A (Tables A-8 through A-21) gives the detailed results of predicting Social Sciences grades with the ASVAB. The two course groups considered are History and a combination of Government and Civics.

Government and Civics. The prediction of grades in Government and Civics courses varies in effectiveness from sample to sample. Table 5 presents summaries; Tables A-8 to A-14 and B-2 give detailed results. Freshmen short-interval validity coefficients are exceptionally high, with a multivariate value of .58 and bivariate values ranging up to .55, a value associated with the equation relating the AFQT scores to course grades. In contrast, long-interval validity for the freshmen course grades is somewhat lower, with a multiple correlation of .43, and the highest bivariate correlation found equal to .39 between course grades and the Mechanical and Crafts composite. The grades for sophomores, in contrast, are better predicted for the 1985-86 academic year than for the 1984-85 academic year, which is unusual in that long-interval validity coefficients -- all else being equal -- are usually lower than short-interval. Grades for juniors are very well predicted both for the short-interval case and for the long-interval case, with multiple correlation values of .56 and .52, respectively, and the best composite predictors found to be the AFQT for short-interval validation (r = .51), and either the AFQT or the Mathematics composite for the case of long-interval validity (r = .47). The AFQT is also the best single predictor for seniors, with a correlation coefficient of .48, which compares well with the multiple correlation of .51 for the prediction of senior grades.

History. History course grades are well predicted throughout the seven analysis groups, as may be seen in Table 5 and in Tables A-15 to A-21. Table B-3 in Appendix B presents the coefficients for predicting History grades from all 10 ASVAB subtests. The multiple correlation values range from a low of .45 for long-interval validation for sophomores, to a high of .61 for short-interval validation for seniors. Among the short-interval bivariate regressions, the best predictor for freshmen was the AFQT, with the General and Academic Ability composites found to be slightly less effective. All of these correlations are about .50. The grades of sophomores and juniors are similarly well predicted by the AFQT (r = .51 for both), although for sophomore grades the Business and Clerical composite is an equally good predictor (r = .52). For the grades of seniors, the most effective composite is the Mathematics composite (r = .59), with the AFQT, the Business and Clerical, and the Electronics and Electrical composites only slightly less effective. The long-interval regressions also show strong prediction. For the grades earned by freshmen, the best predictor is the AFQT (r = .51), with the Business and Clerical composite only slightly lower. The grades of sophomores and juniors are somewhat less effectively predicted; the former have a maximum correlation of .41 with the AFQT, whereas the latter are best predicted by the Business and Clerical composite (r = .46).

Table 5. Summary of Validity Coefficients for Social Studies Courses

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
Government and Civics							
AA	53	33	48	46	33	34	45
Verb	48	33	47	43	28	33	39
Math	53	34	48	47	36	34	47
M&C	37	20[b]	32	32	39	16	24
B&C	53	41	49	46	29	43	44
E&E	48	33	46	45	38	30	41
HS&T	49	29	44	43	36	29	40
AFQT	55	36	51	48	35	38	47
PS	35	28	24	25	11	31	19
Tech	28	13[b]	25	23	37	10[b]	15
Gen	50	34	48	45	35	35	40
All	58	44	56	51	43[b]	47	52
N	353	163	477	772	102	435	910

Table 5. (Concluded)

Composite[a]	Short-interval validity (AY 1984-85) FR	SO	JR	SR	Long-interval validity (AY 1985-86) FR	SO	JR
				History			
AA	49	48	49	55	49	38	42
Verb	48	48	48	50	46	38	42
Math	47	47	47	59	48	38	41
M&C	36	32	31	44	33	26	24
B&C	48	52	50	56	50	40	46
E&E	47	46	47	56	46	38	40
HS&T	47	45	45	53	45	36	37
AFQT	51	51	51	58	51	41	44
PS	26	33	26	35	31	19	29
Tech	28	24	23	36	23	21	17
Gen	50	49	47	54	48	38	41
All	54	55	55	61	54	45	49
N	1,369	1,644	1,324	445	1,566	1,524	446

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions for Composites given in Table 4, page 9.
[b]Coefficients are not significant at $p < .01$.

Foreign Languages

The Foreign Languages course data were not reported separately for different languages but were simply reported as Foreign Language, regardless of the language studied. Data are present for all seven of the analysis groups (Table 6, Tables A-22 to A-28, and B-4). The multiple correlation values are moderate to high, ranging from .42 when predicting the grades of sophomores (long-interval validity) to .56 for the prediction of the grades of freshmen (short-interval validity). The two composites showing the largest number of high correlation values are the Business and Clerical composite and the Mathematics composite. The highest bivariate correlation coefficient for predicting the grades of seniors in the case of short-interval validity is almost as high (.43) as the multiple correlation (.46). Although the highest validities of composites for other analysis groups within Foreign Languages are not as close to their corresponding multiple predictor case as is the senior short-interval validity, none is more than .10 correlation points below the corresponding multiple predictor value. The composites are thus seen as effective predictors of success in Foreign Language courses. The validities approach or exceed .40 in most of the school years, for both short-interval and long-interval validity.

Table 6. Summary of Validity Coefficients for Foreign Language Courses

Composite[a]	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
	FR	SO	JR	SR	FR	SO	JR
AA	44	33	36	39	37	27	37
Verb	39	27	29	32	31	23	34
Math	48	39	39	43	42	33	39
M&C	27	16	18	27	20	16	26
B&C	51	40	39	37	40	35	42
E&E	41	30	33	35	35	28	37
HS&T	40	29	32	36	31	24	35
AFQT	47	36	38	41	40	30	39
PS	33	27	26	12[b]	26	20	24
Tech	17	07[b]	08[b]	18	10	09[b]	19
Gen	44	32	33	34	35	28	39
All	56	50	46	46	50	42	46
N	1,032	933	508	245	822	638	268

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions for Composites given in Table 4, page 9.
[b]Coefficients are not significant at $p < .01$.

Mathematics

The Mathematics group (results shown in Table 7, Tables A-29 to A-50, and Tables B-5 to B-8) is composed of four different courses, yet is characterized by generally high correlation coefficient values in all courses except General Mathematics, where the values are moderate.

General Mathematics. The correlation values for General Mathematics reach a modest high of .38 for the multiple regression (sophomores, short-interval validity; juniors, long-interval validity), and .33 for the bivariate regressions (Mathematics composite, juniors, long-interval validity). As shown in Table 7, prediction for seniors is particularly effective. There is an anomaly in that prediction is especially poor for freshmen taking General Mathematics in 1985-86; no bivariate correlation coefficient is above .19. Within the General Mathematics tables, the Business and Clerical composite and the Mathematics composite are both effective in predicting course grades. Details of the analyses are found in Tables A-29 to A-35 and in Table B-5.

Algebra. Somewhat better prediction is noted for Algebra grades than was found for General Mathematics grades, with multiple correlation coefficients ranging from .43 for sophomores (short-interval and long-interval validity) to .55 for seniors (short-interval

validity). Among the composites, the Business and Clerical composite is again the most effective predictor, with correlation coefficients as high as .42 for freshman, short-interval validity. The Mathematics composite, with a maximum correlation of .45 for seniors (short-interval validity), is also effective. As can also be seen in Table 7, the AFQT is moderately effective as a predictor of Algebra grades. More detailed information concerning these regression analyses is presented in Tables A-36 through A-42 and Table B-6.

Geometry. Geometry grades are also well predicted by the ASVAB, with correlation coefficients as high as .57 for juniors (long-interval validity) in the multiple correlation case, and with bivariate highs ranging from .47 (for juniors, short-interval validity Mathematics composite) to .52 (for seniors, short-interval validity Mathematics composite) as shown in Tables 7, A-43 to A-48, and B-7. Overall, the best-predicting composite is the Mathematics composite; the AFQT predicted somewhat less effectively, and the others predicted even less well.

Calculus. Results of the analyses conducted for Calculus are shown in Tables 7, A-49, A-50, and B-8. The paucity of reported data precluded the possibility of performing more than two sets of analyses for the prediction of calculus grades. Multivariate prediction is effective for both short-interval and long-interval validity, with coefficients of about .50. The Mathematics composite is the most effective composite, with highs of .43 for the short interval and .39 for the long interval.

Table 7. Summary of Validity Coefficients for Mathematics Courses

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
			General Math				
AA	23	21	16	29	10[b]	20	31
Verb	19	17	14	22	07[b]	17	29
Math	27	27	25	32	15	21	33
M&C	18	18	12[b]	28	09[b]	13[b]	21
B&C	32	31	21	26	17	24	31
E&E	23	22	19	30	09[b]	19	31
HS&T	22	22	18	30	11	19	29
AFQT	25	23	18	29	10	19	32
PS	27	29	14[b]	18	19	21	21
Tech	14	15	08[b]	24	06[b]	09[b]	17[b]
Gen	29	29	19	30	15	23	32
All	35	38	33	35	24	29	3
N	1,211	779	356	242	670	397	232

Table 7. (Concluded)

Composite[a]	Short-interval validity (AY 1984-85) FR	SO	JR	SR	Long-interval validity (AY 1985-86) FR	SO	JR
Algebra							
AA	36	29	32	31	37	29	34
Verb	30	23	22	19	31	22	30
Math	40	36	41	45	42	39	40
M&C	21	15	14	15	24	22	20
B&C	42	38	39	33	40	33	38
E&E	33	28	30	32	35	31	37
HS&T	33	25	28	24	35	28	31
AFQT	38	32	34	34	39	32	36
PS	25	24	26	11[b]	21	14	22
Tech	13	08[b]	03[b]	05[b]	15	15	12[b]
Gen	35	29	28	25	37	29	35
All	48	43	50	55	46	43	47
N	1,221	912	614	291	731	646	294
Geometry							
AA	--	45	43	46	46	45	40
Verb	--	37	36	34	38	41	31
Math	--	51	47	52	50	49	51
M&C	--	35	34	43	36	38	37
B&C	--	41	37	37	45	42	33
E&E	--	45	41	44	46	47	42
HS&T	--	45	44	48	44	46	46
AFQT	--	47	46	46	48	49	44
PS	--	11	03[b]	10[b]	20	02[b]	01[b]
Tech	--	26	27	36	27	33	29
Gen	--	43	41	43	46	45	40
All	--	53	52	55	53	54	57
N	--	580	318	116	538	434	134
Calculus							
AA	--	--	--	31	--	--	28
Verb	--	--	--	24[b]	--	--	21
Math	--	--	--	43	--	--	39
M&C	--	--	--	17[b]	--	--	13[b]
B&C	--	--	--	33	--	--	26
E&E	--	--	--	30	--	--	27
HS&T	--	--	--	30	--	--	22
AFQT	--	--	--	35	--	--	32
PS	--	--	--	05[b]	--	--	02[b]
Tech	--	--	--	10[b]	--	--	06[b]
Gen	--	--	--	26	--	--	23
All	--	--	--	51	--	--	49
N	--	--	--	126	--	--	178

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions for Composites given in Table 4, page 9.
[b]Coefficients are not significant at $p < .01$.

Sciences

The results of the analyses of the prediction of grades in Science courses are shown in Tables 8, A-51 to A-72, and B-9 to B-12. The analyses produced variable results, with some high and some low predictive validities. Even predicting the grades of the same course in different years sometimes shows very different results.

General Science. The results of investigating the prediction of General Science course grades are shown in Tables 8, A-51 to A-57, and B-9. The multiple correlation coefficients range from .34 for predicting the grades of juniors and seniors taking General Science in 1984-85 (see Table 8) to a high of .53 for freshmen in 1984-85. The composites also perform well as predictors of final course grades. For short-interval validity, there are many validation coefficients values above .40, with the highest validity coefficient once again associated with the Business and Clerical composite, with a correlation value of .50 for freshman grades. For the short-interval case, the validity coefficients are much higher for freshmen and sophomores than they are for juniors and seniors (see Table 8). Perhaps this difference occurs because General Science is typically taken in the lower high school grades. Those who wait to take it later may be members of a self-selected population who have some characteristics that differentiate them from those who take it earlier (e.g., dislike of science courses, lack of success in science, or disinterest). The predictor and criterion means and standard deviations for juniors and seniors (Tables A-51 through A-57), however, are not low in comparison to those for freshmen and sophomores. The long-interval validity results show lower values, as is usual for the long-interval data; these show moderate coefficients in the .30 to .49 range, with juniors' grades being better predicted than those of freshmen and sophomores. The best composite for predicting junior grades is the AFQT, whereas sophomores' grades are best predicted by the General composite and freshmen grades are best predicted by the Electronics and Electrical composite.

Biology. Biology grades, like those for General Science, were available for all four school years in the case of short-interval validity and for all three school years in the case of long-interval validity (see Tables 8, A-58 to A-64, and B-10). The multiple correlation coefficients range from a low of .46 for freshmen taking Biology in 1985-86 to an unusually

high value of .67 for juniors taking Biology in 1985-86. The bivariate correlation values are also rather high, with many values at or above .40. There is no single composite which is clearly the best for predicting Biology grades, although the Business and Clerical composite is generally effective. The General composite is effective for freshmen for both short-interval and long-interval validity, but several others are also effective. The Business and Clerical composite predicts well for sophomores and juniors, as do the Mathematics and AFQT composites. For seniors, the Business and Clerical composite has a strong correlation of .51; for juniors (long-interval validity), the same composite has a correlation of .59 with final course grade. The long-interval validations show predictive relationships which are almost as strong as the short-interval results.

Physics. The prediction of Physics grades (see Tables 8, A-65, A-66, and B-11) was available only for two groups and was not as successful as predicting Biology grades. The multiple correlation coefficients average .44; the bivariate predictors are more modest, with the Mathematics composite having a correlation coefficient of .42 for seniors (short-interval case), and the Business and Clerical composite having a correlation of .36 for seniors (long-interval case).

Chemistry. The equations derived for the prediction of Chemistry grades (Tables 8, A-67 to A-72, and B-12) vary in their effectiveness as predictors. In the short-interval case, sophomores' Chemistry grades are moderately well predicted by multiple regression (R = .35), whereas junior and senior grades are well predicted (multiple R = .52 in both the short- and long-interval cases). The Mathematics composite is the most effective univariate predictor; it has a correlation of .49 with senior grades. For 1984-85, the juniors' grades are also best predicted by the Mathematics composite; however, the General composite is the best predictor, by a small margin, among a set of poor predictors for sophomore grades (r = .28). For the long-interval case, the multiple regression results in effective prediction, with coefficients ranging from .41 for sophomores to .56 for freshmen. The best composite predictor in the case of long-interval validation is the Mathematics composite for all three groups -- freshmen, sophomores, and juniors. Bivariate regressions for the long-interval validations have correlation values of .49 for predicting freshman grades, .33 for the prediction of sophomores' grades, and .37 for predicting the grades of juniors.

Table 8. Summary of Validity Coefficients for Science Courses

Composite[a]	Short-interval validity (AY 1984-85) FR	SO	JR	SR	Long-interval validity (AY 1985-86) FR	SO	JR
General Science							
AA	45	39	23	26	32	30	48
Verb	44	38	20	30	32	35	48
Math	45	39	27	23	30	29	44
M&C	34	28	11[b]	24	29	27	33
B&C	50	48	25	24	31	30	44
E&E	46	37	22	28	35	34	46
HS&T	42	38	21	28	31	29	43
AFQT	48	41	25	28	31	32	49
PS	32	41	15[b]	13[b]	22	21	25
Tech	27	23	05[b]	24	23	26	27
Gen	49	43	21	29	34	36	46
All	53	50	34[b]	34[b]	40	44	51
N	2,021	365	184	189	283	197	268
Biology I-II							
AA	45	43	42	51	39	39	51
Verb	40	40	40	49	36	35	54
Math	45	46	45	53	39	44	53
M&C	39	30	31	44	26	20	32
B&C	46	48	44	51	40	45	59
E&E	44	43	44	52	37	36	53
HS&T	46	40	41	50	37	35	47
AFQT	46	46	45	54	41	43	57
PS	28	28	21	22	20	28	38
Tech	32	23	25	39	19	11[b]	24
Gen	47	45	44	51	39	38	55
All	51	53	51	56	46	52	67
N	307	1,420	426	215	1,298	357	157
Physics I-II							
AA	--	--	--	37	--	--	27
Verb	--	--	--	30	--	--	18
Math	--	--	--	42	--	--	32
M&C	--	--	--	15[b]	--	--	11[b]
B&C	--	--	--	34	--	--	36
E&E	--	--	--	32	--	--	21
HS&T	--	--	--	31	--	--	23
AFQT	--	--	--	39	--	--	29
PS	--	--	--	06[b]	--	--	24
Tech	--	--	--	07[b]	--	--	03[b]
Gen	--	--	--	29	--	--	23
All	--	--	--	47	--	--	42
N	--	--	--	173	--	--	244

Table 8. (Concluded)

Composite[a]	Short-interval validity (AY 1984-85) FR	SO	JR	SR	Long-interval validity (AY 1985-86) FR	SO	JR
Chemistry I-II							
AA	--	27	38	39	42	27	31
Verb	--	22	30	27	29	21	25
Math	--	26	46	49	49	33	37
M&C	--	26	20	30	21[b]	13	18[b]
B&C	--	26	41	38	46	33	36
E&E	--	27	35	40	39	30	29
HS&T	--	27	34	36	36	22	28
AFQT	--	27	41	41	43	30	34
PS	--	05[b]	14	12[b]	33	12[b]	11[b]
Tech	--	23	11[b]	22	07[b]	05[b]	13[b]
Gen	--	28	34	36	37	25	28
All	--	35[b]	52	52	56	41	45
N	--	175	450	174	137	438	151

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions for Composites given in Table 4, page 9.
[b]Coefficients are not significant at $p < .01$.

Business and Clerical Courses

Four course groups make up the group of Business and Clerical Courses: Secretary and Office Education, Accounting and Bookkeeping, Typing and Word Processing, and Business Math. The results of these analyses are summarized in Tables 9 through 12, and presented in greater detail in Tables A-73 to A-88, and B-13 to B-16.

Secretary and Office Education

The Secretary and Office Education grades are moderately well predicted, with a multiple correlation value in the short-interval case of .42 for the prediction of the grades of seniors, the only school year for which there are data available (see Table 9 for a summary and Tables A-73 to A-75 and B-13 for details). The best corresponding bivariate correlation coefficient is considerably lower: .33 for the relationship between final course grades and the composites of Academic Ability and the AFQT. For the long interval, the multiple correlation is .54 for sophomores and .49 for juniors. The bivariate correlation values for the long interval are slightly lower, with correlations between the Business and Clerical composite and final grades having a value of .50 for sophomores and a value .43 for juniors.

Table 9. Summary of Validity Coefficients for Secretary and Office Education Courses

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
AA	--	--	--	33	--	45	31
Verb	--	--	--	29	--	39	28
Math	--	--	--	32	--	47	37
M&C	--	--	--	18	--	28	18
B&C	--	--	--	23	--	50	43
E&E	--	--	--	28	--	40	30
HS&T	--	--	--	30	--	44	32
AFQT	--	--	--	33	--	48	35
PS	--	--	--	15[b]	--	26	27
Tech	--	--	--	08[b]	--	18[b]	10[b]
Gen	--	--	--	29	--	43	34
All	--	--	--	42	--	54	49
N	--	--	--	234	--	155	229

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions for Composites given in Table 4, page 9.
[b]Coefficients are not significant at $p < .01$.

Accounting and Bookkeeping

The Accounting and Bookkeeping grades are moderately well predicted (results are shown in Tables 10, A-76 to A-79, and B-14), with the multiple correlation values ranging from .45 to .62. The lower value is the long-interval validity for predicting sophomores' grades and the higher is the short-interval validity for predicting juniors' grades. Again, the bivariate correlation coefficients are somewhat lower than the multiple correlations. In the case of the short-interval validities, the juniors' and seniors' grades are best predicted by the Business and Clerical composite ($r = .51$ and $r = .42$). The AFQT is the best predictor of final course grades for sophomores (long-interval validity), with a correlation coefficient of .42. The Business and Clerical composite is the best bivariate predictor of final grades for juniors (long-interval validity), with a correlation coefficient of .42.

Table 10. Summary of Validity Coefficients for Accounting and Bookkeeping Courses

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
AA	--	--	45	41	--	39	27
Verb	--	--	42	32	--	36	26
Math	--	--	46	42	--	40	36
M&C	--	--	16[b]	21	--	24	15[b]
B&C	--	--	51	42	--	40	42
E&E	--	--	39	35	--	37	32
HS&T	--	--	39	36	--	36	25
AFQT	--	--	47	41	--	42	33
PS	--	--	28	32	--	16	27
Tech	--	--	04b	09[b]	--	16	10[b]
Gen	--	--	40	35	--	38	32
All	--	--	62	48	--	45	51
N	--	--	248	258	--	317	200

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions for Composites given in Table 4, page 9.
[b]Coefficients are not significant at $p < .01$.

Typing and Word Processing

Typing and Word Processing grades are available for all seven student groups. Results are presented in Tables 11, A-80 to A-86, and B-15. The validities are high, with the usual pattern of higher correlation values for short-interval validity than for long-interval validity. The multiple correlation values associating ASVAB scores with final grades for freshmen are .55 for short-interval validity and .46 for long-interval validity. The corresponding values for the prediction of grades are .50 and .44 for sophomores and .50 and .43 for juniors. For freshmen, the values of the validation coefficients associated with the bivariate correlation are almost as high as the multiple coefficients, with Business and Clerical composite correlation values of .54 for short-interval and .43 for long-interval validity. The bivariate regressions hold up almost as well for the sophomores. The Business and Clerical composite has a correlation coefficient value of .46 for short-interval validity and the AFQT has a correlation of .40 in the long-interval case. The Business and Clerical composite is again the best bivariate predictor for the juniors, with correlation coefficients of .43 for short-interval and .36 for long-interval validity (a value shared by the Mathematics composite and the AFQT). For seniors, the best predictors are Academic Ability and the AFQT, with correlation values of .42.

Table 11. Summary of Validity Coefficients for Typing and Word Processing Courses

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
AA	46	38	39	42	36	37	35
Verb	46	32	33	37	32	32	28
Math	45	41	39	41	39	38	36
M&C	36	20	21	23	26	26	23
B&C	54	46	43	41	43	36	36
E&E	44	34	32	36	34	33	31
HS&T	45	34	35	36	36	35	33
AFQT	48	41	40	42	39	40	36
PS	34	29	29	27	25	09[b]	23
Tech	30	12	12[b]	13[b]	20	20	16[b]
Gen	49	37	36	37	39	35	34
All	55	50	50	49	46	44	43
N	526	674	412	232	509	423	237

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions for Composites given in Table 4, page 9.
[b]Coefficients are not significant at $p < .01$.

Business Mathematics

Business Mathematics grades (Tables 12, A-87, A-88, and B-16) are not well predicted. Although the multiple correlation is .40 for the prediction of freshmen grades (long-interval validity), the highest bivariate coefficient, for the Mathematics composite, is only .30. Though both of these values are significant, none of the other composites is associated with a significant correlation. For the grades of sophomores (short-interval validity) there is no significant prediction in either the multivariate or the bivariate case.

Table 12. Summary of Validity Coefficients for Business Mathematics Courses

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
AA	--	15[b]	--	--	19[b]	--	--
Verb	--	09[b]	--	--	04[b]	--	--
Math	--	19[b]	--	--	30	--	--
M&C	--	19[b]	--	--	14[b]	--	--
B&C	--	15[b]	--	--	22[b]	--	--
E&E	--	19[b]	--	--	16[b]	--	--
HS&T	--	16[b]	--	--	21[b]	--	--
AFQT	--	15[b]	--	--	18[b]	--	--
PS	--	09[b]	--	--	14[b]	--	--
Tech	--	16[b]	--	--	06[b]	--	--
Gen	--	18[b]	--	--	17[b]	--	--
All	--	22[b]	--	--	40	--	--
N	--	101	--		128	--	--

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions of Composites given in Table 4., p. 9.
[b]Coefficients are not significant at $p < .01$.

Trade and Specialty Courses

The Trade and Specialty group of courses includes Shop, Vocational Agriculture, Home Economics, Drafting and Commercial Art, and Computer Programming. This section presents the results of the analyses conducted for those courses. These results are summarized in Tables 13 through 17 and detailed in Tables A-89 to A-112 and B-17 to B-21.

Shop

The results of using the ASVAB subtests and composites for the prediction of Shop grades are found in Tables 13, A-89 to A-95, and B-17. The results of predicting Shop grades are more variable than are the results in other course areas. Considering the short-interval cases first, the grades of freshmen are well predicted, with the multiple correlation value of .51. The grades of sophomores and seniors are slightly less well predicted (multiple $R = .42$), while juniors' grades are the least well predicted of all (multiple $R = .33$). As for bivariate regressions in the short-interval case, freshmen grades are best predicted by the General composite and the Business and Clerical composite ($r = .47$); sophomores' grades, by the General composite ($r = .37$); and juniors' grades, by the General composite ($r = .24$, a value which is not significant at the .01 level). The

long-interval validity coefficients vary somewhat less. Freshman grades are predicted with a multiple correlation coefficient of .41; the highest composite validity coefficient is .37, observed in connection with the Mechanical and Crafts composite and with the Electronics and Electrical composite. Sophomores' grades are slightly less well predicted, with a multiple correlation of .36 and a best bivariate correlation coefficient of .22 associated with the Technical composite and the Mechanical and Crafts composite, and with an almost equally high value associated with the Mathematics composite. Juniors' grades, in contrast, with a multiple correlation of .42, are well predicted by the combined subtests, but show a best bivariate correlation coefficient of only .26 associated with the Mechanical and Crafts composite.

Table 13. Summary of Validity Coefficients for Shop Courses

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
AA	43	31	17[b]	33	34	12[b]	15[b]
Verb	41	27	20[b]	30	30	10[b]	10[b]
Math	42	36	15[b]	30	32	21[b]	21[b]
M&C	40	35	21[b]	36	37	22	26
B&C	47	35	22[b]	26	31	16[b]	21[b]
E&E	46	36	23[b]	36	37	19[b]	19[b]
HS&T	42	34	21[b]	32	34	16[b]	24[b]
AFQT	43	34	17[b]	31	35	15[b]	17[b]
PS	41	25	22[b]	17[b]	16[b]	07[b]	12[b]
Tech	34	33	21[b]	34	35	22	25
Gen	47	37	24[b]	34	35	18[b]	21[b]
All	51	42	33[b]	42[b]	41	36	42[b]
N	528	255	117	111	233	147	105

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions of Composites given in Table 4., p.9.
[b]Coefficients are not significant at $p < .01$.

Home Economics

Home Economics is the last of the course areas in which samples of sufficient size to analyze and report were present for all seven analysis groups. The results of the analyses are presented in Tables 14, A-96 to A-102, and B-18. Multiple correlation values are generally moderately high, ranging upward from .40 for long-interval prediction for freshmen to .54 for short-interval validity for freshmen. In the case of predicting freshmen grades, the

short-interval multiple correlation coefficient (.54) is considerably higher than the long-interval coefficient (.40). The differences between short-interval and long-interval multiple coefficients for sophomores and juniors is much less -- about .02 correlation points. When freshmen grades are predicted by composites, the maximum validity coefficients are associated with the Business and Clerical composite for both short- and long-term validity (.51 and .38, respectively). The prediction of the grades of sophomores and juniors shows somewhat lower short-interval validity coefficients than does prediction for freshmen, and approximately equivalent long-interval validities. For short-interval validity, sophomores' grades are best predicted by the Business and Clerical composite (r = .39), and juniors' grades are best predicted by the Mathematics composite (r = .39). Seniors' grades show moderately high short-interval predictability, with the Mathematics composite being the best predictor (r = .39) among the composites; the multiple correlation is .45.

Table 14. Summary of Validity Coefficients for Home Economics Courses

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
AA	41	34	34	38	34	32	29
Verb	42	30	32	27	33	31	24
Math	42	38	39	39	30	32	34
M&C	33	25	18	24	25	19	10[b]
B&C	51	39	38	35	38	38	37
E&E	45	33	34	31	33	31	27
HS&T	40	34	31	34	32	29	24
AFQT	44	36	37	37	35	35	32
PS	42	32	22	21	30	27	26
Tech	26	19	09[b]	14	19	14	02[b]
Gen	49	36	33	31	37	34	26
All	54	44	47	45	40	43	45
N	564	338	295	330	320	412	378

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions of Composites given in Table 4., p. 9.
[b]Coefficients are not significant at $p < .01$.

Drafting and Commercial Art

Drafting and Commercial Art course grades are well predicted, as Tables 15, A-103, A-104, and B-19 show. However, there are sufficient data for the reporting of analyses only for sophomores in both the short-interval and the long-interval validity cases. The multiple correlation coefficients are .51 for the short-interval case, and a more modest .37 for the long-interval validity. The highest bivariate correlation (.42) is associated with the Health, Social, and Technology composite for short-interval validity. For long-interval validation, the best predictor is the AFQT, with a validation coefficient of .27.

Table 15. Summary of Validity Coefficients for Drafting and Commercial Art Courses

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
AA	--	36	--	--	--	24[b]	--
Verb	--	36	--	--	--	26	--
Math	--	33	--	--	--	22	--
M&C	--	33	--	--	--	22	--
B&C	--	41	--	--	--	24	--
E&E	--	35	--	--	--	25	--
HS&T	--	42	--	--	--	26	--
AFQT	--	39	--	--	--	27	--
PS	--	17[b]	--	--	--	04[b]	--
Tech	--	31	--	--	--	22	--
Gen	--	41	--	--	--	26	--
All	--	51	--	--	--	37	--
N	--	128	--	--	--	112	

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions of Composites given in Table 4., p. 9.
[b]Coefficients are not significant at $p < .01$.

Vocational Agriculture

The results of predicting Vocational Agriculture final course grades are presented in Tables 16, A-105 to A-108, and B-20. The success of predicting grades varies, with freshmen showing moderately high short-interval validity coefficients; the multiple correlation is .53 and the best bivariate correlation is .46 for the Academic Ability composite. The results of analyzing freshmen courses show no significant validity with any composite in the long-interval case. The results for the prediction of sophomores' grades

show slightly lower short-interval validities, but higher, though still modest, long-interval validities. The multiple correlation is .48 for short-interval prediction and .44 for long-interval prediction. The best composite predictor is the AFQT (r = .42) for short intervals, and the Mathematics composite (r = .33) is best for long intervals.

Table 16. Summary of Validity Coefficients for Vocational Agriculture Courses

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
AA	46	41	--	--	14[b]	25	--
Verb	41	40	--	--	04[b]	24	--
Math	38	36	--	--	15[b]	33	--
M&C	33	32	--	--	10[b]	23[b]	--
B&C	44	40	--	--	06[b]	22[b]	--
E&E	39	33	--	--	10[b]	31	--
HS&T	42	40	--	--	13[b]	31	--
AFQT	44	42	--	--	11[b]	27	--
PS	37	19[b]	--	--	00[b]	04[b]	--
Tech	26	28	--	--	04[b]	19[b]	--
Gen	44	38	--	--	07[b]	25	--
All	53	48	--	--	30[b]	44	--
N	137	130			107	130	

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions of Composites given in Table 4., p. 9.
[b]Coefficients are not significant at $p < .01$.

Computer Programming

The results for the prediction of Computer Programming grades are given in Tables 17, A-109 to A-112, and B-21. Results are available only for juniors and seniors in the case of short-interval validity and for sophomores and juniors in the case of long-interval validity. Prediction was effective in all samples, however, with multiple correlation coefficients above .50 in all four cases. The highest multiple correlation coefficient was for juniors' grades in the long-interval case (R = .62). The best-predicting composite for the same group was the Business and Clerical composite, with a validity coefficient of .54. Short-interval validation for the grades earned by juniors and seniors also resulted in high validities. The juniors' multiple correlation is .58, and the best bivariate correlation is .53 for the relation between final grades and the Mathematics composite. The grades of seniors are similarly well predicted, with a validity coefficient of .48 for the best bivariate prediction equation -- that

using the Mathematics composite as a predictor. Long-interval prediction is also strong, with the grades of sophomores best predicted by the Business and Clerical composite (r = .46).

Table 17. Summary of Validity Coefficients for Computer Programming Courses

	Short-interval validity (AY 1984-85)				Long-interval validity (AY 1985-86)		
Composite[a]	FR	SO	JR	SR	FR	SO	JR
AA	--	--	45	43	--	41	44
Verb	--	--	34	35	--	32	38
Math	--	--	53	48	--	44	50
M&C	--	--	36	32	--	19	19[b]
B&C	--	--	46	39	--	46	54
E&E	--	--	48	43	--	35	40
HS&T	--	--	46	40	--	35	39
AFQT	--	--	48	45	--	45	50
PS	--	--	17	07[b]	--	17	38
Tech	--	--	26	23	--	09[b]	09[b]
Gen	--	--	47	40	--	35	43
All	--	--	58	51	--	53	62
N	--	--	252	158	--	232	164

Note. The decimal points have been omitted from validity coefficients.
[a]Definitions of Composites given in Table 4., p. 9.
[b]Coefficients are not significant at $p < .01$.

IV. DISCUSSION

Overall, the results indicate that the ASVAB, when employed for the prediction of high school grades, shows impressively high criterion-related validity, for both the short-interval and the long-interval validity cases. When it is considered that the data are aggregated across different high schools and that the high schools all have their own standards, teaching methods, and administrative policies, the heterogeneity of the various grading methods might be expected to introduce unpredictable variance into the criterion scores. The result would be analogous to reducing the reliability of the criterion. Though some such unreliability is likely to be present, it is clear that -- in spite of it -- substantial validity coefficients are the rule, not the exception. As discussed in the Results section, many of the courses had validities above .40.

The magnitudes of the observed validity coefficients are uncorrected for range restriction, and are attenuated due to unreliability in the criterion. There is no agreed-upon

estimate for the reliability of high school course grades, but the reliability of the high school composites is high, ranging from .88 to .95 (Palmer, Hartke, Ree, Welsh, & Valentine, 1988). Thus, both restriction in range and unreliability in the criterion measures have attenuated (by some unknown amount) the validities observed in these samples.

In evaluating the practical significance of the correl ion coefficients found here, it is appropriate to note that some of the samples were very large. Large samples make the detection of significant correlation coefficients more likely. The adjusted squared correlations provide a more appropriate basis for comparing and evaluating the results of the various prediction equations in this study than do the significance levels alone.

The ASVAB has been extensively validated against technical school grades in entry-level military occupations (Wilbourn et al., 1984), but it has not been validated against high school course grades. Consideration of the accuracy of the ASVAB selector composites for predicting military technical school grades does provide some information to which one can compare the results of this study. The range of validity coefficients for military specialty school grades is from .30 to .70 (corrected for range restriction). The median values are near .50 (DoD 1984a). The median validity coefficient (uncorrected for range restriction) obtained here is .42. This result is comparable to the results obtained for studies using final technical school grades for military occupations even though results of this study were not corrected for restriction in range. In brief, the validity of the ASVAB for the prediction of high school grades is very similar to the validity of the ASVAB for the prediction of technical school grades.

Although the ASVAB is generally successful in the prediction of high school grades, the effectiveness varies among course areas and with the prediction interval. Table 18 summarizes Tables 4 through 17 by showing for each course and school year only the most effective predictor and the corresponding correlation coefficient. The table illustrates the best prediction obtained for each course and school year combination. Although comparisons of validity coefficients which correspond to different predictors are difficult to interpret and may lead to misleading generalizations, a number of conclusions may be drawn from Table 18. First, it is evident that short-interval validity is slightly higher than long-interval validity. The mean short-interval validity coefficient is .43, whereas the corresponding value for long-interval validity is .40. (Because of the moderate values and

Table 18. Summary of Best Predictor Composites,[a] with Validity Coefficients

Course	Short-interval				Long-interval		
	FR	SO	JR	SR	FR	SO	JR
English	B&C (48)	B&C (51)	B&C (43)	Math (42)	B&C (42)	AFQT (43)	B&C (39)
Government and Civics	AFQT (55)	B&C (41)	AFQT (51)	AFQT (48)	M&C (39)	B&C (43)	AFQT Math (47)
History	AFQT (51)	B&C (52)	AFQT (50)	Math (59)	AFQT (51)	AFQT (41)	B&C (46)
Foreign Language	B&C (51)	B&C (40)	B&C Math (39)	Math (43)	Math (42)	B&C (35)	B&C (42)
General Math	B&C (39)	B&C (31)	Math (25)	Math (32)	B&C (17)	B&C (24)	Math (33)
Algebra	B&C (42)	B&C (38)	Math (41)	Math (45)	Math (42)	Math (39)	Math (40)
Geometry	--	Math (51)	Math (47)	Math (52)	Math (50)	Math AFQT (49)	Math (51)
Calculus	--	--	--	Math (43)	--	--	Math (39)
General Science	B&C (50)	B&C (48)	Math (47)	Ver (30)	Elec (35)	Gen (36)	AFQT (49)
Biology	Gen (47)	B&C (48)	Math AFQT (45)	AFQT (54)	B&C (40)	B&C (45)	B&C (59)
Physics	--	--	--	Math (42)	--	--	B&C (36)
Chemistry	--	Gen (28)	Math (46)	Math (49)	Math (49)	Math B&C (33)	Math (37)
Secretary and Office Education	--	--	--	AA	--	B&C (50)	B&C (43)
Accounting and Bookkeeping	--	--	B&C (51)	B&C Math (42)	--	AFQT (42)	B&C (42)
Typing and Word Processing	B&C (54)	B&C (46)	B&C (43)	AA AFQT (42)	B&C (43)	AFQT (40)	AFQT B&C (36)
Business Math	--	Math M&C Elec (19)	--	--	Math (30)	--	--
Shop	Gen B&C (47)	Gen (37)	Gen (24)	M&C Elec (36)	M&C Elec (37)	M&C Tech (22)	M&C (26)
Drafting and Commercial Art	--	AFQT (27)	--	--	HS&T (42)	--	--
Home Economics	B&C (51)	B&C (39)	B&C (38)	Math (39)	B&C (38)	B&C (38)	B&C (37)
Vocational Agriculture	AA (36)	AFQT (42)	--	--	Math (15)	Math (33)	--
Computer Programming	--	--	Math (53)	Math (48)	--	B&C (46)	B&C (54)

Note: Each table entry shows the predictor composite which was most effective in predicting the course grade for the designated group. The associated validity coefficients are also shown; decimal points are omitted from validity coefficients. Where two or more composites are shown, validity coefficients did not differ at two significant digits.

[a]Definitions of Composites given in Table 4., p. 9.

homogeneity of the correlation coefficients, the raw correlations, not the Fisher r-to-z transformations, were used in computing the mean correlations.) The difference between short-interval and long-interval validity is approximately the same for all three course groups--general academic, business-related, and vocational. Such differences are consistent with the generally observed tendency of measurements which are taken close together in time to intercorrelate more highly than measur nents which are taken at more widely separated times.

There is considerable variation in the differences between short-interval and long-interval validity. The most extreme example counter to the generalization that short-interval validity coefficients are higher than long-interval validity coefficients is seen in the case of General Science, junior year: The highest short-interval bivariate validity coefficient is .27, while that for the long interval is .49. Biology, also in the case of the junior year, is the second most extreme counterexample: The highest bivariate coefficient is .45 for short-interval validity and .59 for long-interval validity. The majority of cases, however, do show better prediction for the short-interval analyses.

There are slight differences in the extent to which it is possible to make accurate predictions within the three course groups. The mean of the coefficients in Table 18 for the general academic courses is .43; that for the business-related courses is .40; and that for the vocational courses is .38. (Because these averages are taken over different numbers of predictors with differing sample sizes, with partially overlapping samples and with different variables entering into the predictions, it is not feasible to perform precise significance tests. Based on the numbers of students involved in the analyses, however, differences of the size reported here are likely to be indicative of underlying population differences.)

English grades are typical of several courses which were all well predicted by a variety of composites, which led to the suggestion in the Results section that an ability measured by many of the ASVAB composites may be important in English courses. Although further investigation would be necessary in order to determine that ability unambiguously, it is at least plausible that the ability is reading or some closely allied measure of verbal ability. Certainly reading skill contributes to success both in high school and in the taking of the ASVAB.

Mathematics courses show some heterogeneity in the extent to which the ASVAB predicts grades. It is particularly evident that the General Mathematics and Business Mathematics courses are predicted less well than are the other courses in the Mathematics group. Business Mathematics and General Mathematics courses may be more variable in content from school to school than are such courses as Algebra and Geometry, which have a certain fixed content area that is customarily covered. It is also possible that such courses may have associated with them more flexible grading standards than courses whose content is standardized. Such content variations and variable grading standards, if in fact present, would tend to lower the validity coefficients when samples are aggregated over a number of schools, as was done in the present study.

In the Results section it was noted that there were anomalous results which were characterized by very low correlation values in the tables representing General Science for juniors and seniors in 1984-85. Although the data do not permit a definite answer as to why prediction is poor in that year for those two classes, there may have been some systematic difference between that year and the succeeding year, a difference such as a new widely adopted textbook or a newly recommended curriculum which came into broad use across different schools.

The results of several of the validity investigations give findings which initially appear to be counterintuitive. For example, Table 5 shows that the Mathematics composite is the best composite for the prediction of senior History grades. For most of the other History predictions, the AFQT was the best predictor, a finding which seems more reasonable. The seniors' History grades, however, were predicted virtually as well by the AFQT as by the Mathematics composite (correlation of .58 vs. .59).

The detailed results, as presented in the tables of Appendix A, include an estimate of the expected value of the validation coefficients if a cross-validation were to be carried out. The extent to which this estimate -- Stein's (1960) estimator -- varies from the raw r-square values can be seen to differ according to the sample size of the validation group. (See Appendix C for a discussion of Stein's estimator.) When the sample is large (e.g., Table A-1 with a sample size of 2,498), Stein's estimator does not differ from the r-square values when two significant digits are shown. In contrast, when the sample is small (e.g., Table A-103 with a sample size of 128), there are small reductions in the bivariate r-square values when comparing the Stein's estimator with the raw r-square. These differences indicate that the adjustment made by Stein's estimator are equivalent to a reduction of two points in

the percentage of variance which the ASVAB scores explain in the criterion scores. The reductions are larger for the multivariate predictions than for the bivariate predictions; in Table A-103 the squared multiple correlation is .26, while the corrected value is .12. Overall, it appears that even with small sample sizes the effects of correcting with Stein's estimator are negligible in the bivariate case, and may be moderate to large in the multivariate cases.

In Table 18, three composites stand out as being the most effective predictors far more often than the others, and five stand out as very rarely being the most effective. The Business and Clerical composite is the most effective composite for 45 of the analyses of bivariate validity, while the Mathematics composite is the most effective for 35 analyses (18 of which involve Mathematics courses). The AFQT is the most effective predictor for 17 analyses. Those 17 courses and the 45 analyses predicted best by the Business and Clerical composite are distributed approximately evenly over the 21 course content areas. In contrast, the Academic Ability composite was the most effective composite for only two analyses; the Verbal composite, for only one; the Health, Social, and Technology composite, for only one; and the Technical composite also for only one. The Perceptual Speed composite was never the most effective predictor.

One may speculate as to why the Business and Clerical composite is so widely effective in predicting high school grades. The subtests which make up the Business and Clerical composite (Word Knowledge, Paragraph Comprehension, Coding Speed, and Mathematics Knowledge) represent all three of the ASVAB's nontechnical factors -- the verbal factor, the quantitative factor, and the speed factor. This composite is representative of, and assesses ability on, all of the battery's nontechnical factors, and so it is likely to be valid in a variety of situations, which is exactly what is observed in the data discussed here.

It is generally true that the validity of a test may be increased by increasing the number of factors which it measures. Those who score well on the Business and Clerical composite must have good verbal skills, have a good working knowledge of basic high-school-level mathematics, and be fast and accurate in performing detailed work. Those qualities well describe the abilities of a good high school student; so, it is not surprising that those who score well on the composite also do well in a wide variety of high school courses.

Though the different composites investigated here vary in their effectiveness as predictors, the battery of tests from which they are drawn is shown to be a versatile and effective predictive instrument. The results of the present study provide convincing evidence of the validity of the ASVAB for predicting high school grades.

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APPENDIX A: SUMMARY STATISTICS BY COURSE AND GRADE LEVEL

Table A-1. ASVAB Short-Interval Validity Summary Statistics for Freshman Academic Year 1984-85, English I-IV

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	83.26	13.96	.43	.19	.19	.19	1.02	.0351	-0.97	574.90
Verbal	121.30	23.44	.41	.17	.17	.17	1.03	.0197	-0.44	500.79
Math	87.97	12.54	.44	.20	.20	.20	1.01	.0400	-1.57	610.54
Mechanical Crafts	166.68	22.27	.31	.10	.10	.10	1.07	.0159	-0.70	271.05
Business & Clerical	131.22	18.39	.48	.23	.23	.23	0.99	.0292	-1.89	730.32
Electronics	169.22	23.61	.42	.18	.18	.18	1.02	.0203	-1.49	545.76
Health, Soc Tech	125.24	19.47	.41	.17	.17	.17	1.03	.0240	-1.06	514.33
AFQT	167.81	26.63	.46	.21	.21	.21	1.01	.0194	-1.30	655.49
Perceptual Speed	96.64	17.09	.31	.10	.10	.10	1.07	.0208	-0.06	272.16
Technical	123.34	17.53	.24	.06	.06	.06	1.10	.0156	0.03	154.13
General	53.20	6.87	.45	.21	.20	.21	1.01	.0746	-2.02	645.36
All Subtests			R = .51, R^2 = .26, R^2 cor = .26, Adj R^2 = .26							

Note. N = 2,498; Criterion Mean = 1.95; SD = 1.13.

Table A-2. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, English I-IV

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	83.92	13.72	.39	.15	.15	.15	1.01	.0314	-0.46	370.62
Verbal	122.71	23.09	.37	.14	.13	.13	1.02	.0175	0.03	318.79
Math	88.45	12.55	.39	.15	.15	.15	1.01	.0343	-0.86	369.60
Mechanical Crafts	167.59	22.25	.26	.07	.07	.07	1.06	.0128	0.04	145.51
Business & Clerical	132.16	17.95	.42	.17	.17	.17	1.00	.0256	-1.20	429.76
Electronics	170.43	23.49	.37	.14	.14	.14	1.02	.0174	-0.80	328.97
Health, Soc Tech	126.19	19.26	.36	.13	.13	.13	1.03	.0205	-0.42	303.44
AFQT	169.16	26.17	.41	.17	.17	.17	1.01	.0172	-0.74	412.19
Perceptual Speed	97.16	16.67	.26	.07	.07	.07	1.06	.0170	0.53	145.09
Technical	124.03	17.62	.19	.03	.03	.03	1.08	.0116	0.74	72.75
General	53.59	6.76	.39	.15	.15	.15	1.01	.0638	-1.24	371.16
All Subtests			R = .45, R^2 = .20, R^2 cor = .20, Adj R^2 = .20							

Note. N = 2,051; Criterion Mean = 2.18; SD = 1.10.

[a] r^2cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-3. ASVAB Short-Interval Validity Summary Statistics for Sophomores
Academic Year 1984-85, English I - IV

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	87.48	15.53	.44	.20	.20	.20	1.02	.0326	-0.75	588.72
Verbal	128.00	25.62	.44	.19	.19	.19	1.02	.0194	-0.38	563.53
Math	91.93	14.25	.45	.21	.21	.21	1.02	.0363	-0.12	621.18
Mechanical Crafts	173.83	25.87	.29	.08	.18	.08	1.09	.0128	-0.12	221.13
Business & Clerical	138.38	20.31	.51	.36	.26	.26	0.98	.0288	-1.88	857.81
Electronics	177.13	26.58	.44	.19	.19	.19	1.03	.0187	-1.20	558.92
Health, Soc Tech	131.11	22.05	.41	.17	.17	.17	1.04	.0211	-0.66	479.33
AFQT	176.31	29.97	.48	.23	.23	.23	1.00	.0182	-1.09	705.71
Perceptual Speed	101.77	17.59	.34	.11	.11	.11	1.07	.0219	-0.12	307.51
Technical	128.54	20.41	.23	.05	.05	.05	1.11	.0124	0.51	124.38
General	55.80	7.66	.46	.22	.21	.21	1.01	.0690	-1.74	654.45
All Subtests			R = .55, R^2 = .30, R^2 cor = .29, Adj R^2 = .30							

Note. N = 2,391; Criterion Mean = 2.107; SD = 1.139.

Table A-4. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, English I-IV

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	88.56	15.41	.40	.16	.16	.16	1.03	.0287	-0.38	375.91
Verbal	129.86	25.32	.39	.15	.15	.15	1.03	.0171	-0.05	354.39
Math	92.86	14.24	.40	.17	.16	.16	1.03	.0311	-0.72	376.32
Mechanical Crafts	175.38	25.75	.25	.06	.06	.06	1.08	.0110	0.23	139.57
Business & Clerical	139.83	19.91	.42	.18	.18	.18	1.01	.0238	-1.16	443.66
Electronics	178.95	26.41	.37	.14	.14	.14	1.04	.0158	-0.67	328.52
Health, Soc Tech	132.64	21.83	.37	.13	.13	.13	1.04	.0187	-0.32	311.46
AFQT	178.54	29.70	.43	.18	.18	.18	1.01	.0161	-0.71	454.25
Perceptual Speed	102.53	17.10	.21	.04	.04	.04	1.09	.0135	0.79	89.53
Technical	129.67	20.32	.20	.04	.04	.04	1.10	.0108	0.77	80.79
General	56.39	7.52	.39	.15	.15	.15	1.03	.0579	-1.10	306.50
All Subtests			R = .47, R^2 = .22, R^2 cor = .22, Adj R^2 = .21							

Note. N = 2,021; Criterion Mean = 2.166; SD = 1.117.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-5. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, English I-IV

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	91.47	16.18	.39	.15	.15	.15	0.99	.0262	-0.22	331.29
Verbal	133.80	26.08	.37	.14	.14	.14	0.10	.0154	0.11	294.11
Quantitative	95.73	15.80	.40	.16	.16	.16	0.99	.0273	-0.44	345.77
Mechanical Crafts	181.36	28.20	.18	.03	.03	.03	1.06	.0069	0.93	60.82
Business & Clerical	143.59	21.12	.43	.18	.18	.18	0.97	.0217	-0.95	402.57
Electronics	185.07	28.46	.35	.12	.12	.12	1.01	.0132	-0.27	252.41
Healt[illegible], Soc Tech	136.72	22.88	.34	.12	.11	.12	1.01	.0160	-0.01	236.60
AFQT	184.24	31.62	.42	.18	.18	.18	0.98	.0143	-0.46	386.81
Perceptual Speed	104.11	17.09	.24	.06	.06	.06	1.04	.0154	0.57	114.83
Technical	134.15	22.52	.10	.01	.00	.01	1.07	.0047	1.55	17.34
General	58.01	8.01	.36	.13	.13	.13	1.01	.0482	-0.62	266.25
All Subtests			R = .49, R^2 = .24, R^2 cor = .23, Adj R^2 = .24							

Note. N = 1,813; Criterion Mean = 2.18; SD = 1.08.

Table A-6. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, English I - IV

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	92.28	16.20	.35	.12	.12	.12	0.97	.0220	0.33	203.89
Verbal	135.18	26.08	.34	.11	.11	.11	0.97	.0134	0.55	194.64
Math	96.61	15.86	.35	.12	.12	.12	0.96	.0229	0.14	213.15
Mechanical Crafts	182.74	28.43	.15	.02	.02	.02	1.02	.0054	1.37	33.71
Business & Clerical	144.72	21.12	.39	.15	.02	.15	0.95	.0190	-0.40	270.08
Electronics	186.87	28.48	.32	.10	.10	.10	0.98	.0116	0.19	171.82
Health, Soc Tech	137.96	22.92	.29	.08	.08	.08	0.99	.0131	0.55	139.06
AFQT	186.02	31.71	.37	.14	.14	.14	0.96	.0120	0.12	238.90
Perceptual Speed	104.70	16.67	.24	.06	.05	.06	1.00	.0146	0.83	88.56
Technical	135.16	22.79	.07	.01	.00	.01	1.03	.0033	1.90	8.28
General	58.50	8.01	.32	.10	.10	.10	0.98	.0411	-0.05	171.06
All Subtests			R = .45, R^2 = .20, R^2 cor = .19, Adj R^2 = .20							

Note. N = 1,506; Criterion Mean = 2.35; SD = 1.03.

[a] r^2cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-7. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, English I - IV

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	93.44	17.27	.38	.15	.15	.15	0.93	.0224	0.19	233.34
Verbal	136.38	27.41	.35	.12	.12	.12	0.95	.0128	0.55	184.94
Math	97.37	17.13	.42	.17	.17	.17	0.92	.0246	-0.10	283.99
Mechanical Crafts	184.33	29.85	.25	.06	.06	.06	0.98	.0083	0.76	87.12
Business & Clerical	146.08	23.10	.39	.16	.15	.15	0.93	.0172	-0.22	248.12
Electronics	187.79	30.45	.37	.14	.14	.14	0.93	.0124	-0.03	220.13
Health, Soc Tech	139.33	24.33	.36	.13	.13	.13	0.94	.0149	0.22	198.43
AFQT	187.91	33.93	.41	.17	.16	.17	0.92	.0121	0.02	267.96
Perceptual Speed	105.30	17.44	.21	.04	.04	.04	0.99	.0121	1.02	61.24
Technical	136.15	23.69	.17	.03	.03	.03	0.99	.0073	1.30	40.75
General	58.94	8.70	.36	.13	.13	.13	0.94	.0415	-0.16	198.15
All Subtests			R = .45, R^2 = .21, R^2 cor = .19, Adj R^2 = .20							

Note. N = 1,349; Criterion Mean = 2.29; SD = 1.01.

Table A-8. ASVAB Short-Interval Validity Summary Statistics for Freshman
Academic Year 1984-85, Government and Civics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	87.42	13.97	.53	.28	.27	.28	0.91	.0401	-1.24	134.71
Verbal	129.26	23.43	.48	.23	.22	.22	0.94	.0216	-.53	102.88
Math	90.93	12.79	.53	.28	.27	.28	0.90	.0438	-1.73	135.16
Mechanical Crafts	172.09	23.20	.37	.14	.13	.13	0.99	.0169	-.65	55.36
Business & Clerical	136.73	19.79	.53	.28	.27	.28	0.90	.0284	-1.62	135.64
Electronics	177.07	24.51	.48	.23	.23	.23	0.93	.0209	-1.45	106.48
Health, Soc Tech	129.75	19.13	.49	.24	.23	.24	0.93	.0271	-1.25	109.25
AFQT	176.26	26.55	.55	.30	.29	.30	0.89	.0219	-1.61	150.35
Perceptual Speed	98.58	17.23	.35	.12	.11	.12	1.00	.0213	.16	47.63
Technical	127.34	18.50	.28	.08	.17	.07	1.02	.0158	.20	28.88
General	55.35	7.23	.50	.25	.26	.25	0.92	.0740	-1.84	119.33
All Subtests			R = .57, R^2 = .33, R^2 cor = .29, Adj R^2 = .31							

Note. N = 353; Criterion Mean = 2.26; SD = 1.06

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) corrections for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-9. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86 Government and Civics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	79.81	12.32	.33	.11	.08	.10	1.05	.0299	-.16	12.44
Verbal	116.17	20.49	.28	.08	.05	.07	1.07	.0152	.46	8.58
Math	84.40	11.93	.36	.13	.10	.12	1.04	.0329	-.55	14.42
Mechanical Crafts	162.11	21.95	.39	.15	.13	.15	1.02	.0198	-.98	18.16
Business & Clerical	125.77	16.74	.29	.08	.05	.07	1.07	.0189	-.16	8.91
Electronics	163.13	22.35	.38	.15	.12	.14	1.03	.0190	-.88	17.28
Health, Soc Tech	119.50	17.92	.36	.13	.11	.12	1.04	.0224	-.46	15.18
AFQT	160.81	23.30	.35	.12	.09	.11	1.04	.0165	-.43	13.76
Perceptual Speed	91.56	16.56	.11	.01	-.02	.00	1.11	.0076	1.53	1.29[c]
Technical	120.50	17.51	.37	.14	.11	.13	1.04	.0233	-.58	15.65
General	51.13	6.59	.35	.13	.10	.12	1.04	.0592	-.80	14.22
All Subtests			R = .43, R^2 = .19, R^2 cor = -.01, Adj R^2 = .10[c]							

Note. N = 102; Criterion Mean = 2.23; SD = 1.11.

Table A-10. ASVAB Short-Interval Validity Summary Statistics for Sophomores Academic Year 1984-85, Government and Civics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	90.71	16.69	.33	.11	.09	.10	1.00	.0208	0.31	19.62
Verbal	131.71	25.48	.33	.11	.09	.10	1.00	.0137	0.39	19.85
Math	95.94	15.75	.34	.12	.10	.11	0.99	.0230	-0.02	21.72
Mechanical Crafts	180.36	26.63	.20	.04	.02	.03	1.03	.0078	0.78	6.61[c]
Business & Clerical	141.50	21.88	.41	.16	.15	.16	0.96	.0195	-0.57	31.70
Electronics	183.82	27.87	.33	.11	.09	.11	0.99	.0126	-0.12	20.01
Health, Soc Tech	136.14	23.30	.29	.08	.07	.08	1.01	.0129	0.43	14.43
AFQT	182.26	32.23	.36	.13	.11	.12	0.99	.0116	0.08	23.23
Perceptual Speed	102.34	17.75	.28	.08	.06	.07	1.01	.0163	0.52	13.24
Technical	132.81	20.71	.13	.02	.00	.01	1.05	.0069	1.28	2.98[c]
General	57.40	8.07	.34	.11	.10	.11	0.99	.0439	-0.33	20.59
All Subtests			R = .44, R^2 = .19, R^2 cor = .08, Adj R^2 = .11[c]							

Note. N = 163; Criterion Mean =2.190; SD = 1.051.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-11. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Government and Civics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	89.00	14.30	.34	.11	.11	.11	1.13	.0280	-0.33	54.78
Verbal	131.12	23.32	.33	.11	.10	.11	1.13	.0169	-0.06	53.06
Quantitative	92.54	13.43	.34	.12	.11	.12	1.12	.0305	-0.66	57.80
Mechanical Crafts	177.57	25.31	.16	.03	.02	.02	1.18	.0075	0.83	11.16
Business & Clerical	138.64	19.04	.43	.18	.18	.18	1.08	.0268	-1.55	96.51
Electronics	179.76	24.34	.30	.09	.08	.09	1.14	.0145	-0.45	41.66
Health, Soc Tech	133.80	21.02	.29	.08	.08	.08	1.14	.0164	-0.04	39.63
AFQT	179.17	27.29	.38	.14	.14	.14	1.11	.0166	-0.81	72.73
Perceptual Speed	100.40	16.71	.31	.10	.09	.09	1.14	.0222	-0.07	46.14
Technical	131.89	20.25	.10	.01	.00	.01	1.19	.0061	1.36	4.66[c]
General	56.56	7.09	.35	.12	.11	.12	1.12	.0582	-1.13	58.83
All Subtests			R = .47, R^2 = .22, R^2 cor = .18, Adj R^2 = .20							

Note. N = 435; Criterion Mean = 2.16; SD = 1.19.

Table A-12. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, Government and Civics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	92.80	15.75	.48	.23	.22	.22	0.98	.0336	-0.70	138.81
Verbal	135.56	25.30	.47	.22	.22	.22	0.98	.0208	-0.40	136.93
Math	95.84	15.65	.48	.23	.22	.23	0.98	.0040	-0.84	140.90
Mechanical Crafts	183.78	28.34	.32	.10	.10	.10	1.06	.0125	0.13	53.31
Business & Clerical	143.13	20.18	.49	.24	.23	.24	0.97	.0269	-1.44	149.15
Electronics	185.75	28.18	.47	.22	.21	.22	0.98	.0184	-1.00	132.54
Health, Soc Tech	138.83	22.87	.44	.20	.19	.20	1.00	.0216	-0.58	116.52
AFQT	186.08	30.60	.51	.26	.26	.26	0.96	.0185	-1.03	166.72
Perceptual Speed	102.13	17.38	.24	.06	.05	.06	1.08	.0156	0.82	30.14
Technical	136.10	22.62	.25	.06	.06	.06	1.08	.0121	0.77	30.65
General	58.28	7.84	.48	.23	.22	.23	0.98	.0676	-1.52	139.72
All Subtests			R = .56, R^2 = .31, R^2 cor = .28, Adj R^2 = .29							

Note. N = 477; Criterion Mean = 2.42; SD = 1.11.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appenix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-13. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Government and Civics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	90.85	15.96	.45	.20	.20	.20	0.88	.0274	-0.06	226.51
Verbal	132.96	25.95	.39	.15	.15	.15	0.90	.0146	0.50	158.38
Math	95.19	15.68	.47	.22	.22	.22	0.86	.0296	-0.39	262.41
Mechanical Crafts	180.21	27.74	.24	.06	.06	.06	0.95	.0086	0.88	56.97
Business & Clerical	143.24	20.41	.44	.19	.19	.19	0.88	.0211	-0.58	215.80
Electronics	183.99	27.75	.41	.16	.16	.16	0.90	.0143	-0.20	178.23
Health, Soc Tech	135.72	22.29	.40	.16	.16	.16	0.90	.0175	0.05	171.18
AFQT	183.12	31.18	.47	.22	.22	.22	0.86	.0149	-0.29	261.58
Perceptual Speed	104.92	16.20	.19	.04	.03	.04	0.96	.0117	1.21	35.20
Technical	133.33	22.33	.15	.02	.02	.02	0.97	.0064	1.58	19.89
General	57.81	7.73	.40	.16	.16	.16	0.90	.0503	-0.48	169.70
All Subtests			R = .52, R^2 = .27, R^2 cor = .25, Adj R^2 = .26							

Note. N = 910; Criterion Mean = 2.43; SD = .98.

Table A-14. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Government and Civics

Composite	Mean	SD	r	r2	r2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	93.03	16.30	.46	.22	.21	.21	0.86	.0276	-0.21	211.11
Verbal	135.26	26.37	.43	.18	.18	.18	0.88	.0157	0.24	170.30
Math	96.49	16.02	.47	.23	.22	.22	0.85	.0288	-0.41	224.27
Mechanical Crafts	182.98	28.98	.32	.10	.10	.10	0.92	.0106	0.43	85.48
Business & Clerical	145.18	21.87	.46	.21	.20	.21	0.87	.0202	-0.57	201.21
Electronics	185.77	28.66	.45	.20	.20	.20	0.87	.0153	-0.48	198.07
Health, Soc Tech	138.56	23.14	.43	.19	.18	.19	0.88	.0181	-0.15	177.06
AFQT	186.61	31.78	.48	.23	.23	.23	0.85	.0147	-0.38	232.09
Perceptual Speed	105.55	17.20	.25	.06	.06	.06	0.94	.0141	0.88	51.02
Technical	135.01	23.50	.23	.05	.05	.05	0.95	.0096	1.07	43.64
General	58.56	8.15	.45	.20	.20	.20	0.87	.0532	-0.75	191.62
All Subtests			R = .51, R^2 = .26, R^2 cor = .24, Adj R^2 = .25							

Note. N = 772; Criterion Mean = 2.36; SD = .97.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-15. ASVAB Short-Interval Validity Summary Statistics for Freshman Academic Year 1984-85, History

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	80.85	13.29	.49	.24	.24	.24	1.05	.0449	-1.57	439.92
Verbal	116.70	22.59	.48	.23	.23	.23	1.06	.0255	-0.91	401.38
Math	86.81	11.86	.47	.22	.22	.22	1.07	.0477	-2.07	381.14
Mechanical Crafts	163.10	20.84	.36	.13	.13	.13	1.13	.0210	-1.35	204.77
Business & Clerical	130.53	18.34	.48	.23	.23	.23	1.06	.0320	-2.11	418.53
Electronics	165.68	22.43	.47	.22	.22	.22	1.07	.0253	-2.12	384.11
Health, Soc Tech	121.98	18.38	.47	.22	.21	.22	1.07	.0306	-1.67	377.03
AFQT	163.45	25.48	.51	.26	.26	.26	1.04	.0242	-1.90	481.22
Perceptual Speed	98.86	17.66	.26	.07	.07	.07	1.17	.0179	0.30	100.08
Technical	120.57	16.51	.28	.08	.08	.08	1.16	.0209	-0.45	120.37
General	52.33	6.50	.50	.25	.25	.25	1.05	.0931	-2.81	454.29
All Subtests			R = .54, R^2 = .29, R^2 cor = .28, adj R^2 = .28							

Note. N = 1,369; Criterion Mean = 2.07; SD = 1.21.

Table A-16. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, History

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	85.39	13.87	.49	.24	.24	.24	1.02	.0419	-1.38	505.05
Verbal	125.40	23.09	.46	.21	.21	.21	1.04	.0235	-0.76	424.44
Math	89.51	12.86	.48	.23	.23	.23	1.03	.0435	-1.70	457.83
Mechanical Crafts	169.59	22.52	.33	.11	.10	.11	1.11	.0170	-0.68	184.69
Business & Clerical	133.37	18.36	.50	.25	.24	.24	1.02	.0317	-2.03	508.34
Electronics	172.92	23.85	.46	.21	.21	.21	1.05	.0225	-1.69	411.22
Health, Soc Tech	128.27	19.35	.45	.20	.20	.20	1.05	.0274	-1.32	399.44
AFQT	172.01	26.53	.51	.26	.26	.26	1.01	.0226	-1.69	549.31
Perceptual Speed	96.72	16.31	.31	.10	.09	.10	1.12	.0224	0.03	166.89
Technical	125.45	17.82	.23	.06	.05	.05	1.14	.0154	0.26	90.70
General	54.22	6.94	.48	.23	.23	.23	1.03	.0806	-2.18	457.08
All Subtests			R = .54, R^2 = .29, R^2 cor = .28, Adj R^2 = .29							

Note. N = 1,566; Criterion Mean = 2.19; SD = 1.18.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-17. ASVAB Short-Interval Validity Summary Statistics for Sophomores
Academic Year 1984-85, History

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	89.09	15.14	.48	.23	.23	.23	1.05	.0383	-1.24	501.77
Verbal	131.44	24.62	.48	.23	.23	.23	1.05	.0235	-0.92	498.95
Quantitative	92.68	14.13	.47	.22	.22	.22	1.06	.0396	-1.50	458.04
Mechanical Crafts	175.56	25.10	.32	.10	.10	.10	1.14	.0152	-0.49	184.31
Business & Clerical	139.75	19.83	.52	.27	.27	.27	1.02	.0312	-2.20	600.95
Electronics	179.43	25.99	.46	.21	.21	.21	1.06	.0211	-1.63	437.77
Health, Soc Tech	133.28	21.26	.45	.20	.20	.20	1.07	.0251	-1.17	405.46
AFQT	179.50	29.09	.51	.26	.26	.26	1.03	.0210	-1.61	581.11
Perceptual Speed	101.13	16.95	.33	.11	.11	.11	1.13	.0232	-0.18	199.01
Technical	129.89	19.82	.24	.06	.06	.05	1.16	.0146	0.27	101.70
General	56.45	7.49	.49	.24	.24	.24	1.05	.0779	-2.23	512.12
All Subtests			R = .55, R^2 = .30, R^2 cor = .29, Adj R^2 = .30							

Note. N = 1,644; Criterion Mean = 2.17; SD = 1.20.

Table A-18. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, History

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	88.05	15.60	.38	.15	.14	.14	1.05	.0276	-0.21	258.21
Verbal	128.71	25.81	.38	.15	.15	.15	1.05	.0169	0.05	264.46
Math	92.84	14.44	.38	.11	.11	.14	1.05	.0298	-0.54	256.59
Mechanical Crafts	173.81	25.56	.26	.07	.07	.07	1.09	.0115	0.23	110.31
Business & Clerical	140.04	20.28	.40	.16	.16	.16	1.04	.0221	-0.87	283.77
Electronics	178.29	26.91	.38	.14	.14	.14	1.05	.0159	-0.60	252.79
Health, Soc Tech	131.49	21.95	.36	.13	.13	.13	1.06	.0184	-0.20	222.69
AFQT	177.56	30.25	.41	.17	.16	.17	1.03	.0153	-0.48	303.12
Perceptual Speed	103.92	16.97	.19	.04	.03	.04	1.11	.0127	0.90	57.55
Technical	128.13	20.09	.21	.04	.04	.04	1.11	.0116	0.75	66.94
General	56.19	7.61	.38	.15	.15	.15	1.05	.0570	-0.97	261.48
All Subtests			R = .45, R^2 = .20, R^2 cor = .19, Adj R^2 = .20							

Note. N = 1,524; Criterion Mean = 2.23; SD = 1.13.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-19. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, History

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	90.85	16.21	.49	.24	.24	.24	1.02	.0355	-1.02	422.80
Verbal	133.07	26.13	.48	.23	.23	.23	1.03	.0214	-0.64	392.51
Math	95.40	15.99	.47	.22	.22	.22	1.03	.0345	-1.08	378.76
Mechanical Crafts	180.44	28.22	.31	.10	.10	.10	1.11	.0129	-0.12	141.68
Business & Clerical	143.31	21.40	.50	.25	.25	.25	1.01	.0272	-1.68	433.89
Electronics	184.46	28.60	.47	.22	.22	.22	1.03	.0192	-1.32	371.85
Health, Soc Tech	135.85	22.79	.45	.20	.20	.20	1.05	.0229	-0.91	329.74
AFQT	183.19	31.83	.51	.26	.26	.26	1.00	.0189	-1.25	474.97
Perceptual Speed	104.67	16.81	.26	.07	.06	.06	1.13	.0178	0.34	92.80
Technical	133.49	22.53	.23	.05	.05	.05	1.14	.0120	0.61	74.68
General	57.85	8.06	.47	.22	.22	.22	1.03	.0681	-1.73	372.82
All Subtests			R = .55, R^2 = .30, R^2 cor = .29, Adj R^2 = .29							

Note. N = 1,324; Criterion Mean = 2.21; SD = 1.17.

Table A-20. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, History

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	91.76	16.83	.42	.18	.17	.17	1.07	.0295	-0.34	95.17
Verbal	135.54	26.51	.42	.17	.17	.17	1.08	.0185	-0.15	92.52
Math	95.77	16.36	.41	.17	.17	.17	1.08	.0299	-0.50	91.77
Mechanical Crafts	183.36	28.38	.24	.06	.05	.06	1.15	.0100	0.53	27.25
Business & Clerical	144.06	22.53	.46	.21	.21	.21	1.05	.0241	-1.12	119.30
Electronics	186.65	28.99	.40	.16	.16	.16	1.08	.0165	-0.71	86.66
Health, Soc Tech	137.25	23.67	.37	.13	.13	.13	1.10	.0183	-0.15	68.82
AFQT	185.19	33.01	.44	.20	.19	.20	1.06	.0159	-0.58	109.02
Perceptual Speed	103.73	17.58	.29	.08	.08	.08	1.13	.0195	0.34	40.69
Technical	136.31	22.38	.17	.03	.02	.03	1.17	.0087	1.17	12.43
General	58.46	8.30	.41	.17	.16	.16	1.08	.0579	-1.02	87.98
All Subtests			R = .50, R^2 = .24, R^2 cor = .21, Adj R^2 = .23							

Note. N = 446; Criterion Mean = 2.36; SD = 1.18.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-21. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, History

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	91.96	18.03	.55	.30	.30	.30	0.97	.0352	-0.66	189.76
Verbal	134.96	28.96	.50	.25	.25	.25	1.00	.0201	-0.14	150.20
Math	95.70	17.65	.59	.35	.34	.35	0.94	.0387	-1.13	235.96
Mechanical Crafts	185.05	29.93	.44	.19	.19	.19	1.04	.0171	-0.58	106.75
Business & Clerical	142.78	24.38	.56	.32	.31	.32	0.96	.0268	-1.25	206.67
Electronics	186.47	32.16	.56	.31	.31	.31	0.96	.0202	-1.19	203.26
Health, Soc Tech	137.88	25.03	.53	.28	.27	.28	0.99	.0244	-0.79	169.73
AFQT	185.04	35.49	.58	.34	.33	.33	0.95	.0189	-0.92	223.27
Perceptual Speed	101.61	18.08	.35	.12	.11	.12	1.09	.0222	0.32	60.44
Technical	137.75	23.24	.36	.13	.12	.13	1.08	.0180	0.10	66.30
General	58.32	9.27	.54	.29	.29	.29	0.97	.0679	-1.38	184.98
All Subtests			R = .61, R^2 = .38, R^2 cor = .35, Adj R^2 = .36							

Note. N = 445; Criterion Mean = 2.58; SD = 1.16.

Table A-22. ASVAB Short-Interval Validity Summary Statistics for Freshman
Academic Year 1984-85, Foreign Language

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	88.47	13.64	.44	.20	.19	.19	1.07	.0386	-1.14	249.72
Verbal	130.34	22.44	.39	.15	.15	.15	1.10	.0206	-0.40	181.56
Math	92.21	13.02	.48	.23	.23	.23	1.05	.0436	-1.74	301.59
Mechanical Crafts	171.86	22.35	.27	.07	.07	.07	1.15	.0144	-0.19	80.80
Business & Clerical	138.68	17.12	.51	.26	.26	.26	1.03	.0353	-2.61	355.76
Electronics	177.59	23.74	.41	.17	.17	.17	1.09	.0208	-1.41	213.35
Health, Soc Tech	131.78	19.16	.40	.16	.16	.16	1.09	.0249	-0.99	195.37
AFQT	178.09	25.99	.47	.22	.22	.22	1.05	.0217	-1.58	296.47
Perceptual Speed	101.48	15.17	.33	.11	.11	.11	1.13	.0260	-0.36	126.63
Technical	126.33	17.45	.17	.03	.03	.03	1.17	.0119	0.77	32.39
General	55.87	6.56	.44	.20	.19	.20	1.07	.0805	-2.22	250.86
All Subtests			R = .56, R^2 = .32, R^2 cor = .30, Adj R^2 = .31							

Note. N = 1,032; Criterion Mean = 2.28; SD = 1.19.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-23. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, Foreign Language

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	89.91	13.18	.37	.14	.14	.14	1.01	.0307	-0.23	132.32
Verbal	132.59	21.79	.31	.10	.10	.10	1.03	.0156	0.47	89.30
Math	93.59	12.86	.42	.17	.17	.17	0.99	.0351	-0.74	170.65
Mechanical Crafts	173.44	22.17	.20	.04	.04	.04	1.07	.0097	0.86	33.24
Business & Clerical	141.06	16.73	.40	.16	.16	.16	0.99	.0262	-1.16	159.31
Electronics	179.91	23.52	.35	.12	.12	.12	1.02	.0163	-0.39	116.21
Health, Soc Tech	133.55	18.56	.31	.10	.09	.10	1.03	.0182	0.11	87.20
AFQT	181.00	24.95	.40	.16	.16	.16	1.00	.0173	-0.59	153.50
Perceptual Speed	102.81	14.94	.26	.07	.06	.07	1.05	.0187	0.61	58.30
Technical	127.24	17.45	.10	.01	.01	.01	1.08	.0062	1.74	8.31
General	56.60	6.40	.35	.12	.12	.12	1.02	.0590	-0.85	116.48
All Subtests			R = .50, R^2 = .25, R^2 cor = .23, Adj R^2 = .24							

Note. N = 822; Criterion Mean = 2.54; SD = 1.09.

Table A-24. ASVAB Short-Interval Validity Summary Statistics for Sophomores Academic Year 1984-85, Foreign Language

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	94.58	14.33	.33	.11	.11	.11	1.06	.0259	0.05	113.87
Verbal	139.86	22.28	.27	.07	.07	.07	1.08	.0135	0.61	72.26
Math	97.98	14.52	.39	.15	.15	.15	1.03	.0304	-0.47	169.84
Mechanical Crafts	179.74	24.54	.16	.03	.02	.02	1.11	.0073	1.19	24.17
Business & Clerical	148.30	17.35	.40	.16	.15	.16	1.03	.0257	-1.31	174.63
Electronics	188.11	25.43	.30	.09	.09	.09	1.07	.0134	-0.02	94.83
Health, Soc Tech	139.80	20.38	.29	.08	.08	.08	1.08	.0157	0.30	82.53
AFQT	190.70	27.38	.36	.13	.13	.13	1.05	.0148	-0.32	138.82
Perceptual Speed	107.00	14.66	.27	.07	.07	.07	1.08	.0206	0.30	72.60
Technical	131.51	19.13	.07	.00	.00	.00	1.12	.0038	1.99	4.02[c]
General	59.12	6.74	.32	.10	.10	.10	1.06	.0528	-0.62	104.32
All Subtests			R = .50, R^2 = .25, R^2 cor = .23, Adj R^2 = .24[c]							

Note. N = 933; Criterion Mean = 2.50; SD = 1.12.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-25. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Foreign Language

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	93.20	15.59	.27	.07	.07	.07	0.99	0.0177	1.03	49.53
Verbal	136.92	24.70	.23	.06	.05	.05	1.00	0.0098	1.34	37.10
Quantitative	97.46	14.62	.33	.11	.11	.11	0.97	0.0232	0.42	77.63
Mechanical Crafts	177.55	25.15	.16	.02	.02	.02	1.02	0.0064	1.54	16.18
Business & Clerical	147.84	18.19	.35	.12	.12	.12	0.96	0.0199	-0.26	90.05
Electronics	186.11	26.37	.28	.08	.08	.08	0.99	0.0110	0.64	54.89
Health, Soc Tech	138.07	21.70	.24	.06	.05	.06	1.00	0.0114	1.10	39.20
AFQT	188.26	29.66	.30	.09	.09	.09	0.98	3.0105	0.71	63.75
Perceptual Speed	107.42	15.77	.20	.04	.04	.04	1.01	0.0134	1.25	27.82
Technical	129.75	19.49	.09	.01	.00	.01	1.03	0.0050	2.04	5.69[c]
General	58.49	7.05	.28	.08	.08	.08	0.99	0.0413	0.27	55.36
All Subtests			R = .42, R^2 = .18, R^2 cor = .15, Adj R^2 = .17							

Note. N = 638; Criterion Mean = 2.68; SD = 1.03.

Table A-26. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, Foreign Language

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	95.63	15.17	.36	.13	.13	.13	1.03	.0265	0.08	77.67
Verbal	140.02	24.08	.29	.09	.08	.08	1.06	.0134	0.74	47.31
Math	99.43	15.66	.39	.16	.15	.15	1.01	.0278	-0.15	92.99
Mechanical Crafts	181.75	25.88	.18	.03	.03	.03	1.09	.0078	1.20	17.51
Business & Clerical	149.51	19.51	.39	.16	.15	.15	1.01	.0223	-0.72	93.05
Electronics	189.90	27.20	.33	.11	.10	.11	1.04	.0133	0.09	60.97
Health, Soc Tech	141.22	21.33	.32	.10	.10	.10	1.05	.0165	0.29	57.05
AFQT	192.93	29.57	.38	.14	.14	.14	1.02	.0141	-0.11	84.81
Perceptual Speed	106.70	15.31	.26	.07	.06	.07	1.07	.0188	0.61	36.85
Technical	132.88	20.52	.08	.01	.00	.00	1.10	.0045	2.01	3.57[c]
General	59.47	7.39	.33	.11	.10	.10	1.04	.0487	-0.28	60.20
All Subtests			R = .46, R^2 = .21, R^2 cor = .18, Adj R^2 = .19[c]							

Note. N = 508; Criterion Mean = 2.61; SD = 1.10.

[a] r^2 cor = corrected r^2 (or r^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

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Table A-27. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Foreign Language

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	95.13	15.69	.37	.13	.13	.13	0.97	.0243	0.49	41.41
Verbal	138.59	24.48	.34	.12	.11	.12	0.98	.0147	0.78	35.92
Math	99.66	16.24	.39	.15	.14	.15	0.96	.0248	0.33	47.02
Mechanical Crafts	180.88	27.38	.26	.07	.06	.06	1.01	.0099	1.02	19.32
Business & Clerical	150.77	18.97	.42	.18	.17	.18	0.95	.0232	-0.69	57.94
Electronics	189.19	28.64	.37	.14	.13	.14	0.97	.0135	0.25	42.69
Health, Soc Tech	140.59	22.27	.35	.12	.11	.12	0.98	.0164	0.50	37.37
AFQT	192.40	30.53	.39	.15	.14	.15	0.96	.0132	0.27	46.90
Perceptual Speed	108.46	15.13	.24	.06	.05	.05	1.01	.0164	1.03	16.04
Technical	132.12	21.21	.19	.04	.03	.03	1.02	.0096	1.55	10.47
General	59.40	7.41	.39	.15	.14	.15	0.96	.0542	-0.41	46.57
All Subtests				$R = .46$, $R^2 = .21$, R^2 cor = .14, Adj $R^2 = .18$						

Note. N = 268; Criterion Mean = 2.81; SD = 1.04.

Table A-28. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Foreign Language

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	97.66	17.35	.39	.15	.14	.15	1.04	.0254	0.10	43.64
Verbal	142.62	27.48	.32	.10	.09	.10	1.07	.0131	0.71	27.50
Math	101.54	17.27	.43	.19	.18	.19	1.02	.0284	-0.30	56.60
Mechanical Crafts	184.54	29.88	.27	.07	.06	.07	1.09	.0100	0.73	18.39
Business & Clerical	153.44	21.99	.37	.14	.13	.14	1.05	.0191	-0.35	39.11
Electronics	192.91	30.82	.35	.13	.11	.12	1.06	.0130	0.08	34.72
Health, Soc Tech	144.22	24.71	.36	.13	.12	.12	1.06	.0164	0.22	35.77
AFQT	196.85	34.03	.41	.16	.15	.16	1.04	.0135	-0.07	47.74
Perceptual Speed	110.20	14.97	.12	.01	.00	.01	1.12	.0091	1.58	3.57[c]
Technical	134.54	23.62	.18	.03	.02	.03	1.11	.0087	1.41	8.32
General	60.67	8.40	.34	.12	.11	.11	1.06	.0462	-0.22	32.39
All Subtests				$R = .46$, $R^2 = .22$, R^2 cor = .14, Adj $R^2 = .18$[c]						

Note. N = 245; Criterion Mean = 2.58; SD = 1.13.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-29. ASVAB Short-Interval Validity Summary Statistics for Freshman Academic Year 1984-85, General Math

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	76.22	10.80	.23	.05	.05	.05	1.04	.0231	0.04	69.32
Verbal	110.28	19.61	.19	.04	.04	.04	1.05	.0106	0.64	46.90
Math	81.53	8.53	.27	.07	.07	.07	1.03	.0336	-0.93	92.82
Mechanical Crafts	157.69	18.16	.18	.03	.03	.03	1.06	.0107	0.13	40.77
Business & Clerical	121.93	15.83	.32	.10	.10	.10	1.02	.0216	-0.82	136.20
Electronics	157.26	17.44	.23	.05	.05	.05	1.04	.0144	-0.45	69.50
Health, Soc Tech	115.71	15.15	.22	.05	.05	.05	1.05	.0157	0.00	61.97
AFQT	153.82	20.20	.25	.06	.06	.06	1.04	.0133	-0.24	81.13
Perceptual Speed	91.47	18.37	.27	.07	.07	.07	1.03	.0158	0.37	94.96
Technical	117.61	15.34	.14	.02	.02	.02	1.06	.0099	0.65	24.44
General	49.61	5.43	.29	.09	.09	.09	1.03	.0582	-1.08	114.86
All Subtests			R = .35, R^2 = .12, R^2 cor = .11, Adj R^2 = .12							

Note. N = 1,211; Criterion Mean = 1.81; SD = 1.07.

Table A-30. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, General Math

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	75.33	10.61	.10	.01	.01	.01	1.05	.0095	1.20	6.19[c]
Verbal	109.56	20.07	.07	.00	.00	.00	1.05	.0034	1.54	2.87[c]
Math	80.58	8.28	.15	.02	.02	.02	1.05	.0187	0.05	14.65
Mechanical Crafts	156.73	17.96	.09	.01	.00	.01	1.05	.0052	1.10	5.30[c]
Business & Clerical	120.20	15.51	.17	.03	.03	.03	1.04	.0118	0.50	20.67
Electronics	156.13	17.66	.09	.01	.00	.01	1.05	.0053	1.08	5.34[c]
Health, Soc Tech	114.76	15.04	.11	.01	.01	.01	1.05	.0075	1.06	7.61
AFQT	152.03	20.18	.10	.01	.01	.01	1.05	.0053	1.10	6.98
Perceptual Speed	89.98	18.28	.19	.04	.03	.04	1.04	.0110	0.92	25.29
Technical	117.13	15.37	.06	.00	.01	.00	1.05	.0044	1.40	2.80[c]
General	49.17	5.47	.15	.02	.02	.02	1.04	.0292	0.50	15.60
All Subtests			R = .24, R^2 = .06, R^2 cor = .03, Adj R^2 = .04[c]							

Note. N = 670; Criterion Mean = 1.92; SD = 1.06.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-31. ASVAB Short-Interval Validity Summary Statistics for Sophomores
Academic Year 1984-85, General Math

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	76.57	11.75	.21	.04	.04	.04	1.12	.0203	0.36	34.88
Verbal	110.37	21.11	.17	.03	.02	.03	1.13	.0090	0.92	21.77
Math	82.22	9.18	.27	.07	.07	.07	1.11	.0338	-0.87	61.24
Mechanical Crafts	159.69	21.28	.18	.03	.03	.03	1.13	.0099	0.33	23.03
Business & Clerical	124.15	17.07	.31	.10	.10	.10	1.09	.0211	-0.71	84.78
Electronics	158.90	19.57	.22	.05	.05	.05	1.12	.0130	-0.16	40.27
Health, Soc Tech	116.06	17.06	.22	.05	.05	.05	1.12	.0139	0.19	39.67
AFQT	154.17	21.97	.23	.05	.05	.05	1.12	.0118	0.10	41.60
Perceptual Speed	95.12	20.38	.29	.09	.08	.08	1.10	.0165	0.35	72.48
Technical	119.09	17.85	.15	.02	.02	.02	1.14	.0098	0.75	18.23
General	50.27	6.13	.29	.08	.08	.08	1.10	.0539	-0.80	70.03
All Subtests				R = .38, R^2 = .14, R^2 cor = .12, Adj R^2 = 13						

Note. N = 779; Criterion Mean = 1.91; SD = 1.15.

Table A-32. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, General Math

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	76.46	12.41	.20	.04	.03	.04	1.08	.0173	6.56	15.71
Verbal	110.94	22.52	.17	.03	.02	.03	1.09	.0084	0.95	12.12
Math	82.21	9.68	.21	.04	.04	.04	1.08	.0234	-0.05	17.68
Mechanical Crafts	158.48	20.37	.13	.02	.01	.01	1.10	.0070	0.78	6.70[c]
Business & Clerical	124.06	18.46	.24	.06	.05	.05	1.07	.0141	0.14	23.17
Electronics	158.80	20.48	.19	.04	.03	.03	1.08	.0103	0.25	15.05
Health, Soc Tech	115.58	17.20	.19	.03	.03	.03	1.08	.0119	0.51	14.13
AFQT	154.38	23.79	.19	.04	.03	.03	1.08	.0090	0.50	15.33
Perceptual Speed	94.61	20.48	.22	.04	.04	.04	1.08	.0112	0.83	17.75
Technical	118.10	16.98	.09	.01	.00	.01	1.10	.0057	1.21	3.11[c]
General	50.17	6.33	.23	.05	.04	.05	1.07	.0392	-0.08	21.15
All Subtests				R = .29, R^2 = .08, R^2 cor = .03, Adj R^2 = .24[c]						

Note. N = 397; Criterion Mean = 1.88; SD = 1.10.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-33. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, General Math

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	79.08	13.68	.16	.03	.02	.02	1.06	.0218	0.95	9.72
Verbal	113.90	23.99	.14	.02	.01	.02	1.06	.0062	1.26	6.88
Math	84.17	11.45	.25	.06	.06	.06	1.04	.0236	-0.03	24.25
Mechanical Crafts	164.13	24.51	.12	.01	.01	.01	1.06	.0054	1.08	5.44[c]
Business & Clerical	128.06	20.13	.21	.04	.04	.04	1.05	.0112	0.53	16.35
Electronics	163.18	23.32	.19	.04	.03	.03	1.05	.0088	0.52	13.59
Health, Soc Tech	119.45	19.18	.18	.03	.02	.03	1.05	.0099	0.77	11.64
AFQT	159.10	26.27	.18	.03	.03	.03	1.05	.0074	0.78	12.15
Perceptual Speed	97.83	21.49	.14	.02	.01	.02	1.06	.0068	1.30	6.72[c]
Technical	122.52	20.36	.08	.01	.00	.00	1.07	.0044	1.42	2.55[c]
General	51.27	7.21	.19	.04	.03	.03	1.05	.0278	0.52	12.90
All Subtests			R = .33, R^2 = .11, R^2 cor = .06, Adj R^2 = .08[c]							

Note. N = 356; Criterion Mean = 1.96; SD = 1.07.

Table A-34. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, General Math

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	80.68	14.96	.31	.09	.08	.09	1.11	.0237	0.13	23.61
Verbal	118.09	25.07	.29	.09	.08	.08	1.11	.0136	0.43	21.78
Math	84.95	12.31	.33	.11	.10	.11	1.10	.0311	-0.60	28.14
Mechanical Crafts	168.87	27.64	.21	.05	.03	.04	1.14	.0089	0.53	10.94
Business & Clerical	129.03	20.67	.31	.10	.08	.09	1.11	.0173	-0.19	24.14
Electronics	166.54	24.47	.31	.09	.08	.09	1.11	.0146	-0.39	23.98
Health, Soc Tech	122.95	21.28	.29	.08	.07	.08	1.11	.0157	0.10	20.90
AFQT	162.60	28.50	.32	.10	.09	.10	1.10	.0131	-0.10	26.79
Perceptual Speed	96.26	20.55	.21	.04	.03	.04	1.14	.0118	0.90	10.56
Technical	127.01	22.94	.17	.03	.02	.02	1.15	.0086	0.95	6.82[c]
General	52.75	7.75	.32	.10	.10	.10	1.10	.0476	-0.47	25.89
All Subtests			R = .38, R^2 = .14, R^2 cor = .06, Adj R^2 = .10							

Note. N = 232; Criterion Mean = 2.04; SD = 1.16.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-35. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, General Math

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	79.30	14.35	.29	.09	.07	.08	1.02	.0237	0.09	22.50
Verbal	114.31	24.21	.22	.05	.04	.05	1.03	.0136	0.69	12.53
Math	83.91	11.81	.32	.10	.09	.10	1.01	.0311	-0.62	27.63
Mechanical Crafts	164.73	25.51	.28	.08	.07	.07	1.02	.0089	-0.11	20.28
Business & Clerical	126.10	20.39	.26	.07	.06	.06	1.02	.0173	0.09	17.52
Electronics	163.56	24.00	.30	.09	.08	.08	1.01	.0146	-0.34	23.19
Health, Soc Tech	119.80	20.09	.30	.09	.07	.08	1.01	.0157	-0.07	23.11
AFQT	159.26	26.96	.29	.08	.07	.08	1.02	.0131	-0.01	21.88
Perceptual Speed	95.11	21.34	.18	.03	.02	.03	1.05	.0118	0.97	7.67
Technical	123.10	20.80	.24	.06	.04	.05	1.03	.0086	0.32	14.22
General	51.53	7.55	.30	.09	.08	.08	1.01	.0476	-0.34	22.97
All Subtests			R = .35, R^2 = .12, R^2 cor = .04, Adj R^2 = .08							

Note. N = 242; Criterion Mean = 1.80; SD = 1.06.

Table A-36. ASVAB Short-Interval Validity Summary Statistics for Freshman
Academic Year 1984-85, Algebra

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	89.42	12.90	.36	.13	.12	.13	1.12	.0329	-0.79	176.39
Verbal	130.84	21.52	.30	.09	.09	.09	1.14	.0165	-0.02	119.02
Math	93.61	12.34	.40	.16	.16	.16	1.09	.0386	-1.46	230.78
Mechanical Crafts	174.26	21.74	.21	.05	.04	.04	1.17	.0117	0.11	57.89
Business & Clerical	139.37	15.65	.42	.18	.18	.18	1.08	.0322	-2.34	264.76
Electronics	179.57	22.38	.33	.11	.11	.11	1.12	.0178	-1.06	153.90
Health, Soc Tech	133.49	18.27	.33	.11	.11	.11	1.13	.0213	-0.70	145.73
AFQT	179.99	24.39	.38	.14	.14	.14	1.10	.0184	-1.17	202.17
Perceptual Speed	101.51	13.91	.25	.06	.06	.06	1.15	.0217	-0.06	83.38
Technical	128.04	17.26	.13	.02	.01	.02	1.18	.0087	1.03	19.79
General	56.33	6.10	.35	.13	.12	.12	1.12	.0692	-1.75	174.25
All Subtests			R = .48, R^2 = .23, R^2 cor = .22, Adj R^2 = .22							

Note. N = 1,221; Criterion Mean = 2.15; SD = 1.19.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-37. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, Algebra

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	86.62	12.57	.37	.14	.13	.14	1.11	.0352	-1.05	115.99
Verbal	127.30	21.28	.31	.09	.09	.09	1.14	.0172	-0.19	76.00
Math	90.38	11.51	.42	.18	.18	.18	1.08	.0440	-1.97	160.21
Mechanical Crafts	172.01	22.00	.24	.06	.06	.05	1.16	.0129	-0.21	43.33
Business & Clerical	135.71	15.84	.40	.16	.16	.16	1.09	.0302	-2.10	139.66
Electronics	175.18	21.58	.35	.12	.12	.12	1.12	.0195	-1.40	102.84
Health, Soc Tech	129.89	18.07	.35	.12	.12	.12	1.12	.0229	-0.96	99.11
AFQT	174.28	23.52	.39	.15	.15	.15	1.10	.0199	-1.47	132.67
Perceptual Speed	99.49	15.41	.21	.05	.04	.05	1.17	.0166	0.35	35.25
Technical	127.34	17.91	.15	.02	.02	.02	1.18	.0102	0.71	17.29
General	55.12	6.03	.37	.13	.13	.13	1.11	.0727	-2.00	113.46
All Subtests			R = .46, R^2 = .22, R^2 cor = .19, Adj R^2 = .21							

Note. N = 731; Criterion Mean = 2.00; SD = 1.19.

Table A-38. ASVAB Short-Interval Validity Summary Statistics for Sophomores Academic Year 1984-85, Algebra

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	91.30	13.93	.29	.08	.08	.08	1.11	.0238	-0.16	81.90
Verbal	134.52	23.19	.23	.05	.05	.05	1.12	.0114	0.48	50.37
Math	94.69	13.00	.36	.13	.13	.13	1.08	.0318	-1.00	134.28
Mechanical Crafts	178.69	24.61	.15	.02	.02	.02	1.14	.0071	0.75	21.07
Business & Clerical	143.24	17.69	.38	.14	.14	.14	1.07	.0246	-1.51	150.66
Electronics	182.97	24.01	.28	.08	.05	.08	1.11	.0135	-0.46	78.30
Health, Soc Tech	136.34	19.87	.25	.06	.06	.06	1.12	.0144	0.04	59.82
AFQT	183.84	26.45	.32	.10	.10	.10	1.09	.0139	-0.55	102.88
Perceptual Speed	104.82	15.59	.24	.06	.06	.06	1.12	.0181	0.11	57.93
Technical	131.97	19.76	.08	.01	.00	.01	1.15	.0047	1.39	5.90[c]
General	57.79	6.74	.29	.08	.08	.08	1.11	.0492	-0.83	81.60
All Subtests			R = .43, R^2 = .19, R^2 cor = .17, Adj R^2 = .18							

Note. N = 912. Criterion Mean = 2.01; SD = 1.15.

[a] r^2cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-39. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Algebra

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	92.22	15.38	.29	.08	.08	.08	1.16	.0228	-0.12	58.92
Verbal	134.66	25.36	.22	.05	.04	.05	1.18	.0104	0.59	31.83
Math	96.94	14.58	.00	.15	.15	.15	1.11	.0326	-1.18	117.16
Mechanical Crafts	179.87	26.21	.22	.05	.04	.05	1.18	.0101	0.16	32.57
Business & Clerical	145.35	18.71	.33	.11	.11	.11	1.14	.0216	-1.15	80.40
Electronics	185.34	26.87	.31	.10	.09	.10	1.15	.0140	-0.61	69.08
Health, Soc Tech	137.58	21.98	.28	.08	.08	.08	1.16	.0155	-0.15	55.69
AFQT	185.95	29.45	.32	.10	.10	.10	1.15	.0132	-0.46	73.62
Perceptual Speed	105.82	15.33	.14	.02	.02	.02	1.20	.0112	0.80	13.10
Technical	132.16	20.71	.15	.02	.02	.02	1.20	.0089	0.81	15.31
General	58.23	7.31	.29	.08	.08	.08	1.16	.0479	-0.80	58.71
All Subtests			R = .43, R^2 = .19, R^2 cor = .16, Adj R^2 = .17							

Note. N = 646; Criterion Mean = 1.99; SD = 1.21.

Table A-40. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, Algebra

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	96.64	15.59	.32	.10	.10	.10	1.19	.0260	-0.47	71.28
Verbal	141.01	25.12	.22	.05	.04	.05	1.22	.0111	0.49	31.57
Math	102.12	15.51	.41	.17	.17	.17	1.14	.0336	-1.38	127.21
Mechanical Crafts	187.15	27.41	.14	.02	.01	.02	1.24	.0063	0.87	11.84
Business & Clerical	151.04	19.70	.39	.15	.15	.15	1.16	.0247	-1.68	107.97
Electronics	194.62	27.32	.30	.09	.09	.09	1.20	.0139	-0.65	61.34
Health, Soc Tech	143.72	22.10	.28	.08	.08	.08	1.20	.0161	-0.26	53.29
AFQT	195.47	30.30	.34	.12	.11	.12	1.18	.0142	-0.73	81.66
Perceptual Speed	107.68	14.58	.26	.07	.06	.07	1.21	.0222	-0.35	43.78
Technical	137.19	22.00	.03	.00	.00	.00	1.26	.0019	1.79	0.66[c]
General	60.58	7.51	.28	.08	.07	.08	1.21	.0467	-0.78	51.79
All Subtests			R = .50, R^2 = .25, R^2 cor = .23, Adj R^2 = .24[c]							

Note. N = 614; Criterion Mean = 2.05; SD = 1.26.

[a]r2 cor = corrected r2 (or r2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b]All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-41. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Algebra

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	95.39	14.14	.34	.12	.11	.11	1.04	.0265	-0.32	38.35
Verbal	140.46	23.40	.30	.09	.09	.09	1.05	.0141	0.22	29.02
Math	99.98	14.15	.40	.16	.15	.15	1.01	.0308	-0.87	54.39
Mechanical Crafts	184.29	26.34	.20	.04	.03	.04	1.08	.0085	0.64	12.61
Business & Clerical	150.49	17.38	.38	.14	.14	.14	1.02	.0241	-1.41	49.38
Electronics	191.86	25.97	.37	.13	.13	.13	1.03	.0155	-0.76	45.05
Health, Soc Tech	141.78	19.85	.31	.09	.09	.09	1.05	.0170	-0.21	30.45
AFQT	193.22	27.29	.36	.13	.12	.12	1.03	.0144	-0.57	42.49
Perceptual Speed	108.54	13.93	.22	.05	.04	.05	1.07	.0174	0.32	14.83
Technical	135.52	22.02	.12	.01	.00	.01	1.09	.0059	1.41	4.13[c]
General	60.12	6.78	.35	.12	.11	.12	1.03	.0559	-1.16	39.45
All Subtests			R = .47, R^2 = .22, R^2 cor = .17, Adj R^2 = .22							

Note. N = 294; Criterion Mean = 2.21; SD = 1.10.

Table A-42. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Algebra

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	98.73	16.25	.31	.09	.09	.09	1.10	.0219	-0.02	30.17
Verbal	143.39	26.47	.19	.04	.03	.03	1.14	.0083	0.95	10.88
Math	104.25	15.82	.45	.21	.20	.20	1.03	.0332	-0.32	75.18
Mechanical Crafts	190.74	29.90	.15	.02	.01	.02	1.14	.0057	1.05	6.53[c]
Business & Clerical	154.66	19.72	.33	.11	.10	.11	1.09	.0194	-0.86	35.48
Electronics	198.15	29.14	.32	.10	.09	.10	1.10	.0125	-0.34	31.97
Health, Soc Tech	146.36	23.04	.24	.06	.05	.06	1.12	.0122	0.35	18.32
AFQT	199.52	31.86	.34	.12	.11	.11	1.09	.0124	-0.33	38.13
Perceptual Speed	110.44	14.93	.11	.01	.00	.01	1.15	.0088	1.17	3.76[c]
Technical	139.64	24.51	.05	.00	-.01	.00	1.16	.0025	1.79	0.80[c]
General	61.77	7.90	.25	.06	.05	.06	1.12	.0366	-0.12	19.26
All Subtests			R = .55, R^2 = .30, R^2 cor = .24, Adj R^2 = .27							

Note. N = 291; Criterion Mean = 2.14; SD = 1.16.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-43. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, Geometry

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	92.67	13.23	.46	.22	.21	.22	0.97	.0383	-1.25	147.10
Verbal	135.58	22.58	.38	.15	.14	.14	1.01	.0185	-0.21	91.71
Math	96.86	12.86	.50	.25	.25	.25	0.95	.0428	-1.84	182.02
Mechanical Crafts	177.70	22.57	.36	.13	.13	.13	1.02	.0176	-0.82	181.28
Business & Clerical	144.08	15.78	.45	.20	.20	.20	0.98	.0309	-2.15	132.78
Electronics	184.54	24.58	.46	.21	.21	.21	0.97	.0210	-1.57	145.33
Health, Soc Tech	137.78	18.54	.44	.19	.19	.19	0.98	.0260	-1.28	128.92
AFQT	186.59	25.05	.48	.23	.23	.23	0.96	.0209	-1.60	160.14
Perceptual Speed	103.75	13.46	.20	.04	.04	.04	1.07	.0166	0.58	23.47
Technical	129.90	17.80	.27	.07	.07	.07	1.05	.0166	0.14	42.44
General	57.86	6.37	.46	.21	.20	.21	0.97	.0783	-2.23	140.93
All Subtests			R = .53, R^2 = .29, R^2 cor = .26, Adj R^2 = .27							

Note. N = 538; Criterion Mean = 2.30; SD = 1.09.

Table A-44. ASVAB Short-Interval Validity Summary Statistics for Sophomores Academic Year 1984-85, Geometry

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	97.92	13.48	.45	.20	.20	.20	0.94	.0353	-1.02	147.89
Verbal	143.27	21.36	.37	.13	.13	.13	0.98	.0181	-0.16	89.73
Math	102.91	13.47	.51	.26	.26	.26	0.91	.0400	-1.68	203.18
Mechanical Crafts	186.03	24.53	.35	.12	.12	.12	0.99	.0151	-0.38	81.56
Business & Clerical	152.28	16.67	.41	.17	.16	.17	0.96	.0260	-1.52	116.79
Electronics	195.24	24.04	.45	.20	.20	.20	0.94	.0196	-1.40	144.37
Health, Soc Tech	144.94	19.51	.45	.20	.20	.20	0.94	.0243	-1.09	146.26
AFQT	197.84	25.60	.47	.22	.22	.22	0.93	.0194	-1.41	165.35
Perceptual Speed	107.40	13.41	.11	.01	.01	.01	1.05	.0087	1.51	7.09
Technical	135.58	19.74	.26	.07	.06	.07	1.02	.0139	0.55	42.10
General	60.77	6.40	.43	.18	.18	.18	0.95	.0708	-1.86	130.59
All Subtests			R = .53, R^2 = .28, R^2 cor = .25, Adj R^2 = .27							

Note. N = 580; Criterion Mean = 2.44; SD = 1.06.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-45. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Geometry

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	93.45	13.46	.45	.21	.20	.20	0.99	.0373	-1.41	112.11
Verbal	137.79	21.89	.41	.17	.16	.17	1.00	.0208	-0.79	88.09
Math	96.90	12.55	.49	.24	.23	.23	0.97	.0429	-2.08	133.40
Mechanical Crafts	181.12	24.91	.38	.15	.14	.15	1.02	.0171	-1.02	75.10
Business & Clerical	147.33	15.18	.42	.17	.17	.17	1.01	.0303	-2.39	90.43
Electronics	186.51	23.46	.47	.22	.21	.22	0.98	.0221	-2.05	121.70
Health, Soc Tech	139.29	19.50	.46	.21	.20	.20	0.99	.0258	-1.52	112.76
AFQT	188.61	24.95	.49	.24	.24	.24	0.97	.0219	-2.05	138.96
Perceptual Speed	107.58	14.11	.02	.00	.00	.00	1.11	.0013	1.94	0.12[c]
Technical	133.53	20.03	.33	.11	.10	.11	1.05	.0182	-0.35	52.33
General	59.00	6.28	.46	.21	.20	.20	0.99	.0798	-2.63	111.44
All Subtests			R = .54, R^2 = .29, R^2 cor = .25, Adj R^2 = .27[c]							

Note. N = 434; Criterion Mean = 2.08; SD = 1.11.

Table A-46. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, Geometry

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	94.98	13.79	.43	.18	.18	.18	0.93	.0319	-1.01	71.64
Verbal	139.78	23.12	.36	.13	.13	.13	0.96	.0162	-0.23	48.52
Math	99.61	12.97	.47	.22	.22	.22	0.90	.0374	-1.70	91.25
Mechanical Crafts	184.25	25.77	.34	.11	.11	.11	0.97	.0134	-0.43	40.25
Business & Clerical	150.62	16.78	.37	.14	.13	.14	0.95	.0228	-1.40	51.09
Electronics	191.81	24.12	.41	.17	.16	.17	0.94	.0175	-1.33	64.65
Health, Soc Tech	141.18	19.44	.44	.20	.19	.19	0.91	.0234	-1.27	77.47
AFQT	192.41	26.05	.46	.21	.21	.21	0.91	.0812	-1.47	85.94
Perceptual Speed	109.01	13.77	.03	.00	-.01	.00	1.03	.0021	1.79	0.26[c]
Technical	135.66	21.16	.27	.07	.06	.07	0.99	.0130	0.26	24.59
General	60.05	6.57	.41	.17	.16	.16	0.94	.0635	-1.79	62.92
All Subtests			R = .52, R^2 = .27, R^2 cor = .22, Adj R^2 = .25[c]							

Note. N = 318; Criterion Mean = 2.03; SD = 1.03.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-47. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Geometry

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	94.64	14.36	.40	.16	.14	.16	1.00	.0306	-1.04	25.78
Verbal	136.81	23.47	.31	.10	.08	.09	1.04	.0143	-0.10	13.89
Math	99.44	13.69	.51	.26	.25	.26	0.94	.0408	-2.20	47.41
Mechanical Crafts	183.76	28.62	.37	.13	.11	.13	1.02	.0139	-0.70	20.40
Business & Clerical	148.22	16.44	.33	.11	.09	.10	1.03	.0217	-1.36	15.91
Electronics	190.34	23.79	.42	.18	.16	.17	0.99	.0193	-1.82	28.70
Health, Soc Tech	140.23	20.56	.46	.21	.19	.20	0.97	.0241	-1.53	34.58
AFQT	190.28	26.12	.44	.20	.18	.19	0.98	.0184	-1.65	32.00
Perceptual Speed	108.36	15.25	.01	.00	.02	.00	1.09	-.5768	21.91	0.01[c]
Technical	134.54	23.67	.29	.09	.07	.08	1.04	.0134	0.05	12.33
General	59.43	6.73	.40	.16	.14	.16	1.00	.0653	-2.03	25.75
All Subtests			R = .57, R^2 = .32, R^2 cor = .20, Adj R^2 = .27[c]							

Note. N = 134; Criterion Mean = 1.85; SD = 1.09.

Table A-48. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Geometry

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	93.66	16.53	.46	.21	.19	.21	1.05	.0330	-1.31	31.14
Verbal	135.86	27.62	.34	.12	.09	.11	1.11	.0146	-0.20	15.10
Math	99.09	15.30	.52	.27	.25	.26	1.01	.0398	-2.16	41.64
Mechanical Crafts	185.05	31.19	.43	.19	.16	.18	1.07	.0163	-1.22	25.88
Business & Clerical	147.87	20.42	.37	.14	.12	.13	1.10	.0216	-1.41	18.63
Electronics	188.89	29.56	.44	.19	.17	.18	1.07	.0173	-1.49	26.64
Health, Soc Tech	140.66	24.22	.48	.23	.21	.22	1.04	.0232	-1.47	33.39
AFQT	189.50	31.56	.46	.21	.19	.21	1.05	.0173	-1.49	30.98
Perceptual Speed	107.05	15.70	.10	.01	-.02	.00	1.18	.0074	0.99	1.12[c]
Technical	136.60	25.18	.36	.13	.11	.12	1.10	.0169	-0.52	17.09
General	59.35	8.36	.43	.18	.16	.18	1.07	.0604	-1.80	25.61
All Subtests			R = .55, R^2 = .30, R^2 cor = .16, Adj R^2 = .24[c]							

Note. N = 116; Criterion Mean = 1.78; SD = 1.18.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-49. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Calculus

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	111.05	11.03	.28	.08	.06	.07	0.94	.0249	0.05	13.75
Verbal	160.66	17.24	.21	.05	.03	.04	0.96	.0120	0.88	7.58
Math	118.15	11.01	.39	.15	.14	.15	0.90	.0349	-1.32	29.39
Mechanical Crafts	206.59	25.98	.13	.02	.00	.01	0.97	.0049	1.79	2.81[c]
Business & Clerical	170.53	11.71	.26	.07	.05	.06	0.95	.0218	-0.91	11.81
Electronics	220.96	21.99	.27	.07	.06	.07	0.94	.0121	0.14	12.83
Health, Soc Tech	163.65	17.10	.22	.05	.03	.04	0.96	.0126	0.74	8.27
AFQT	225.18	20.25	.32	.10	.09	.10	0.93	.0156	-0.70	18.70
Perceptual Speed	114.60	11.03	.02	.00	-.02	.00	0.98	.0017	2.61	0.06[c]
Technical	149.06	21.76	.06	.00	-.02	.00	0.98	.0029	2.38	0.68[c]
General	67.54	5.60	.23	.05	.03	.05	0.96	.0394	0.15	8.66
All Subtests			R = .49, R^2 = .24, R^2 cor = .13, Adj R^2 = .19[c]							

Note. N = 163; Criterion Mean = 2.81; SD = .98.

Table A-50. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Calculus

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	113.67	10.56	.31	.10	.07	.09	0.89	.0277	-0.29	12.11
Verbal	164.04	17.02	.24	.06	.03	.05	0.91	.0128	0.75	6.44[c]
Math	121.06	10.68	.43	.18	.16	.17	0.84	.0370	-1.62	24.27
Mechanical Crafts	210.55	24.89	.17	.03	.00	.02	0.92	.0063	1.54	3.19[c]
Business & Clerical	174.13	13.96	.33	.11	.08	.10	0.88	.0217	-0.92	13.07
Electronics	225.43	20.91	.30	.09	.07	.08	0.89	.0135	-0.19	11.23
Health, Soc Tech	166.97	16.78	.30	.09	.07	.08	0.89	.0167	0.07	11.05
AFQT	230.38	19.99	.31	.12	.10	.12	0.87	.0164	-0.92	15.64
Perceptual Speed	116.12	11.43	.05	.00	-.03	.00	0.93	.0037	2.43	0.23[c]
Technical	151.54	21.05	.10	.01	-.02	.00	0.93	.0044	2.19	1.12[c]
General	68.83	5.55	.27	.07	.04	.06	0.90	.0439	-0.16	8.11
All Subtests			R = .51, R^2 = .26, R^2 cor = .10, Adj R^2 = .09[c]							

Note. N = 112; Criterion Mean = 2.86; SD = .93.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-51. ASVAB Short-Interval Validity Summary Statistics for Freshman Academic Year 1984-85, General Science

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	82.30	13.28	.45	.20	.20	.20	1.03	.0394	-1.29	516.28
Verbal	119.93	22.58	.44	.19	.19	.19	1.04	.0224	-0.73	473.87
Math	87.06	11.78	.45	.20	.20	.20	1.03	.0445	-1.92	519.04
Mechanical Crafts	165.56	21.37	.34	.12	.11	.11	1.09	.0184	-1.10	262.92
Business & Clerical	130.10	17.50	.50	.25	.25	.25	1.01	.0330	-2.34	664.82
Electronics	167.78	22.43	.46	.21	.21	.21	1.03	.0238	-2.04	543.39
Health, Soc Tech	123.88	18.48	.42	.18	.18	.17	1.05	.0264	-1.32	435.28
AFQT	165.87	25.12	.48	.23	.23	.23	1.02	.0220	-1.70	593.79
Perceptual Speed	96.29	17.13	.32	.11	.10	.10	1.10	.0220	-0.16	237.49
Technical	122.67	16.96	.27	.07	.07	.07	1.12	.0185	-0.31	159.11
General	52.78	6.52	.49	.24	.24	.24	1.01	.0867	-2.63	631.23
All Subtests			R = .53, R^2 = .28, R^2 cor = .28, Adj R^2 = .28							

Note. N = 2,021; Criterion Mean = 1.95; SD = 1.16.

Table A-52. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, General Science

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	76.19	11.84	.32	.10	.09	.10	1.06	.0307	-0.58	32.94
Verbal	109.74	20.59	.32	.10	.09	.10	1.07	.0173	-0.14	31.55
Math	81.73	9.70	.30	.09	.08	.09	1.07	.0348	-1.08	27.99
Mechanical Crafts	158.16	19.12	.29	.08	.07	.08	1.08	.0169	-0.91	25.46
Business & Clerical	119.24	17.08	.31	.09	.08	.09	1.07	.0200	-0.63	28.81
Electronics	157.11	19.80	.35	.13	.12	.12	1.05	.0200	-1.39	40.17
Health, Soc Tech	116.21	16.23	.31	.10	.09	.09	1.07	.0215	-0.74	30.08
AFQT	153.62	22.23	.31	.09	.08	.09	1.07	.0154	-0.61	28.97
Perceptual Speed	86.04	17.78	.22	.05	.04	.05	1.10	.0142	0.55	14.87
Technical	117.92	15.56	.23	.05	.04	.05	1.09	.0168	-0.21	16.02
General	49.02	6.26	.34	.12	.11	.11	1.06	.0611	-1.23	36.93
All Subtests			R = .40, R^2 = .16, R^2 cor = .09, Adj R^2 = .13							

Note. N = 283; Criterion Mean = 1.76; SD = 1.12.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-53. ASVAB Short-Interval Validity Summary Statistics for Sophomores
Academic Year 1984-85, General Science

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	81.36	15.15	.39	.15	.15	.15	1.13	.0314	-0.75	64.98
Verbal	117.86	25.37	.38	.15	.14	.14	1.13	.0185	-0.37	62.59
Math	86.46	12.83	.39	.16	.15	.15	1.12	.0376	-1.44	66.99
Mechanical Crafts	165.87	24.76	.28	.08	.07	.07	1.18	.0137	-0.47	30.41
Business & Clerical	128.29	20.10	.48	.23	.23	.23	1.07	.0294	-1.96	110.45
Electronics	166.84	25.01	.37	.14	.13	.13	1.14	.0181	-1.20	57.36
Health, Soc Tech	122.99	21.60	.38	.14	.13	.14	1.13	.0213	-0.80	59.68
AFQT	163.64	28.77	.41	.17	.17	.17	1.11	.0176	-1.07	75.25
Perceptual Speed	93.56	19.17	.41	.17	.16	.17	1.12	.0262	-0.64	73.56
Technical	123.10	19.58	.23	.05	.04	.04	1.19	.0141	0.08	19.39
General	52.17	7.77	.43	.19	.18	.18	1.10	.0681	-1.74	83.43
All Subtests			R = .50, R^2 = .25, R^2 cor = .21, Adj R^2 = .23							

Note. N = 365; Criterion Mean = 1.81; SD = 1.22.

Table A-54. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, General Science

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	79.28	15.24	.30	.09	.07	.08	0.98	.0199	0.48	18.58
Verbal	113.55	26.47	.35	.12	.11	.12	0.97	.0135	0.53	26.81
Math	85.73	12.36	.29	.08	.07	.08	0.99	.0240	0.00	17.70
Mechanical Crafts	163.60	24.63	.27	.07	.06	.07	0.99	.0114	0.19	15.73
Business & Clerical	128.54	21.51	.30	.09	.08	.09	0.98	.0145	0.20	19.76
Electronics	164.47	25.47	.34	.12	.11	.11	0.97	.0139	-0.22	26.16
Health, Soc Tech	119.94	20.98	.29	.08	.07	.08	0.99	.0141	0.36	17.71
AFQT	159.98	29.40	.32	.10	.09	.10	0.98	.0111	0.28	21.83
Perceptual Speed	98.02	20.94	.21	.04	.03	.04	1.01	.0101	1.06	8.71
Technical	121.44	19.51	.26	.07	.05	.06	0.99	.0138	0.38	14.40
General	51.77	7.79	.36	.13	.11	.12	0.96	.0472	-0.39	28.76
All Subtests			R = .44, R^2 = .19, R^2 cor = .10, Adj R^2 = .15							

Note. N = 197; Criterion Mean = 2.056; SD = 1.03.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-55. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, General Science

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	81.77	14.06	.23	.05	.04	.05	1.01	.0173	0.45	10.56
Verbal	118.64	24.16	.20	.04	.02	.03	1.02	.0086	0.84	7.58
Math	87.07	12.06	.27	.07	.06	.07	1.00	.0234	-0.17	14.44
Mechanical Crafts	169.89	26.08	.11	.01	-.01	.01	1.04	.0042	1.15	2.05[c]
Business & Clerical	130.17	19.75	.25	.06	.05	.06	1.01	.0131	0.16	11.98
Electronics	169.61	24.04	.22	.05	.03	.04	1.02	.0095	0.26	9.13
Health, Soc Tech	124.08	20.05	.21	.05	.03	.04	1.02	.0111	0.48	8.81
AFQT	164.55	26.65	.25	.06	.05	.06	1.01	.0097	0.27	12.01
Perceptual Speed	97.17	20.21	.15	.02	.01	.02	1.03	.0075	1.14	3.91[c]
Technical	126.86	22.00	.05	.00	.01	.00	1.04	.0025	1.55	0.49[c]
General	53.20	7.43	.21	.04	.03	.04	1.02	.0290	0.32	8.19
All Subtests			R = .34, R^2 = .11, R^2 cor = .00, Adj R^2 = .06[c]							

Note. N = 184; Criterion Mean = 1.86; SD = 1.04.

Table A-56. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, General Science

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	86.86	16.57	.48	.23	.22	.22	0.95	.0310	-0.42	77.77
Verbal	127.68	27.44	.48	.23	.23	.23	0.95	.0190	-0.16	81.12
Math	91.09	14.30	.44	.19	.18	.19	0.97	.0330	-0.74	62.88
Mechanical Crafts	179.44	29.14	.33	.11	.10	.11	1.02	.0123	0.06	33.13
Business & Clerical	138.07	22.17	.44	.19	.18	.19	0.97	.0212	-0.65	62.15
Electronics	179.89	28.16	.46	.21	.20	.21	0.96	.0175	-0.88	69.99
Health, Soc Tech	131.05	23.35	.43	.19	.18	.19	0.97	.0200	-0.35	61.44
AFQT	174.63	31.74	.49	.24	.23	.24	0.94	.0166	-0.63	83.48
Perceptual Speed	102.47	19.62	.25	.06	.05	.06	1.05	.0139	0.84	18.17
Technical	134.36	23.63	.27	.07	.07	.07	1.04	.0125	0.59	21.41
General	56.42	6.51	.46	.21	.21	.21	0.96	.0586	-1.04	72.26
All Subtests			R = .51, R^2 = .26, R^2 cor = .20, Adj R^2 = .23							

Note. N = 268; Criterion Mean = 2.27; SD = 1.08.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-57. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, General Science

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	89.64	16.24	.26	.07	.05	.06	1.10	.0184	0.66	13.85
Verbal	131.79	27.20	.30	.09	.07	.08	1.09	.0123	0.68	17.85
Math	92.99	15.23	.23	.05	.04	.05	1.11	.0169	0.74	10.10
Mechanical Crafts	182.10	28.99	.24	.06	.04	.05	1.10	.0095	0.57	11.80
Business & Clerical	140.39	21.93	.24	.06	.05	.05	1.10	.0127	0.53	11.91
Electronics	182.59	28.23	.28	.08	.06	.07	1.09	.0111	0.28	15.44
Health, Soc Tech	134.16	22.67	.28	.08	.07	.08	1.09	.0142	0.41	16.28
AFQT	179.80	31.40	.28	.08	.07	.08	1.09	.0103	0.46	16.47
Perceptual Speed	101.63	18.47	.13	.02	.00	.01	1.13	.0079	1.50	3.15[c]
Technical	135.87	23.46	.24	.06	.04	.05	1.11	.0114	0.75	11.05
General	57.30	8.56	.29	.08	.07	.08	1.09	.0381	0.01	16.88
All Subtests			R = .34, R^2 = .12, R^2 cor = .01, Adj R^2 = .07[c]							

Note. N = 189; Criterion Mean = 2.31; SD = 1.14.

Table A-58. ASVAB Short-Interval Validity Summary Statistics for Freshman
Academic Year 1984-85, Biology I-II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	93.35	14.69	.45	.21	.20	.20	1.09	.0377	-1.21	79.53
Verbal	137.37	23.60	.40	.16	.15	.16	1.12	.0206	-0.53	58.06
Math	96.58	14.60	.45	.21	.20	.20	1.09	.0378	-1.35	79.07
Mechanical Crafts	178.93	25.08	.39	.15	.14	.15	1.12	.0189	-1.07	54.26
Business & Clerical	143.99	18.61	.46	.22	.21	.21	1.08	.0304	-2.07	83.92
Electronics	185.34	26.05	.44	.20	.19	.19	1.09	.0207	-1.53	74.50
Health, Soc Tech	138.99	20.92	.46	.21	.21	.21	1.08	.0269	-1.44	83.01
AFQT	187.71	28.43	.46	.21	.21	.21	1.08	.0198	-1.40	82.58
Perceptual Speed	102.70	14.25	.28	.08	.07	.08	1.17	.0240	-0.16	26.08
Technical	131.14	19.73	.32	.10	.09	.10	1.15	.0197	-0.29	34.84
General	58.11	7.14	.47	.22	.21	.22	1.08	.0798	-2.33	85.65
All Subtests			R = .51, R^2 = .26, R^2 cor = .21, Adj R^2 = .24							

Note. N = 307; Criterion Mean = 2.303; SD = 1.216.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-59. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, Biology I-II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	85.21	13.55	.39	.15	.15	.15	1.03	.0322	-0.57	235.29
Verbal	124.70	22.87	.36	.13	.13	.17	1.04	.0178	-0.04	199.02
Math	89.49	12.30	.39	.15	.15	.13	1.03	.0353	-0.98	232.66
Mechanical Crafts	168.93	22.00	.26	.07	.06	.07	1.07	.0134	-0.08	97.30
Business & Clerical	134.24	16.87	.40	.16	.16	.16	1.02	.0265	-1.38	248.69
Electronics	172.50	23.07	.37	.14	.14	.14	1.03	.0180	-0.92	208.84
Health, Soc Tech	127.76	18.99	.37	.14	.13	.13	1.04	.0216	-0.58	203.35
AFQT	171.54	25.72	.41	.17	.17	.17	1.02	.0179	-0.88	265.27
Perceptual Speed	99.19	15.87	.20	.04	.03	.04	1.09	.0138	0.81	51.96
Technical	124.74	17.49	.19	.04	.04	.04	1.09	.0124	0.63	51.04
General	54.31	6.44	.39	.15	.15	.15	1.03	.0675	-1.48	232.52
All Subtests			R = .46, R^2 = .21, R^2 cor = .20, Adj R^2 = .20							

Note. N = 1,298; Criterion Mean = 2.18; SD = 1.11.

Table A-60. ASVAB Short-Interval Validity Summary Statistics for Sophomores Academic Year 1984-85, Biology I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	88.16	15.17	.43	.19	.19	.19	1.01	.0320	-0.73	328.48
Verbal	129.01	25.16	.40	.16	.16	.16	1.02	.0179	-0.22	275.24
Math	92.58	13.95	.46	.21	.21	.21	0.99	.0371	-1.35	387.66
Mechanical Crafts	174.98	25.98	.30	.09	.09	.09	1.06	.0131	-0.20	144.89
Business & Clerical	139.91	19.14	.48	.23	.22	.23	0.98	.0279	-1.82	419.07
Electronics	178.39	26.28	.43	.19	.19	.19	1.01	.0184	-1.20	326.83
Health, Soc Tech	132.17	21.73	.40	.16	.16	.16	1.02	.0208	-0.66	276.84
AFQT	177.63	29.15	.46	.21	.21	.21	0.99	.0176	-1.05	380.55
Perceptual Speed	104.18	16.30	.28	.08	.08	.08	1.07	.0193	0.07	122.15
Technical	129.35	20.61	.23	.05	.05	.05	1.09	.0126	0.45	81.49
General	56.38	7.31	.45	.20	.20	.20	1.00	.0690	-1.80	362.30
All Subtests			R = .53, R^2 = .28, R^2 cor = .27, Adj R^2 = .28							

Note. N = 1,402; Criterion Mean = 2.087; SD = 1.118.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-61. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Biology I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	85.54	14.17	.39	.15	.14	.15	1.03	.0306	-0.60	62.97
Verbal	125.12	23.48	.35	.12	.12	.12	1.05	.0167	-0.07	49.85
Math	89.82	13.48	.44	.19	.19	.19	1.01	.0364	-1.25	84.78
Mechanical Crafts	170.82	23.18	.20	.04	.03	.04	1.10	.0097	0.36	14.96
Business & Clerical	136.66	18.65	.45	.20	.20	.20	1.00	.0270	-1.67	90.30
Electronics	173.08	24.06	.36	.13	.13	.13	1.04	.0170	-0.91	54.52
Health, Soc Tech	128.48	19.75	.35	.12	.11	.12	1.05	.0197	-0.51	48.91
AFQT	172.75	27.36	.43	.18	.18	.18	1.01	.0175	-1.00	979.87
Perceptual Speed	100.03	17.36	.28	.08	.07	.07	1.08	.0179	0.23	29.71
Technical	126.75	18.48	.11	.01	.00	.01	1.11	.0068	1.16	4.49[c]
General	54.71	6.96	.38	.15	.14	.14	1.03	.0614	-1.34	60.72
All Subtests			R = .52, R^2 = .27, R^2 cor = .22, Adj R^2 = .25							

Note. N = 357; Criterion Mean = 2.02; SD = 1.12.

Table A-62. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, Biology I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	87.85	16.41	.42	.17	.17	.17	1.00	.0279	-0.55	88.84
Verbal	127.55	27.35	.40	.16	.15	.15	1.01	.0159	-0.12	78.69
Math	92.26	15.06	.45	.20	.20	.20	0.98	.0330	-1.14	108.93
Mechanical Crafts	175.28	28.23	.31	.10	.09	.10	1.05	.0122	-0.24	46.31
Business & Clerical	140.15	19.78	.44	.20	.19	.20	0.99	.0247	-1.55	104.07
Electronics	177.86	28.10	.44	.19	.19	.19	0.99	.0171	-1.14	100.26
Health, Soc Tech	131.48	23.49	.41	.16	.16	.16	1.01	.0190	-0.59	83.32
AFQT	176.85	31.55	.45	.20	.19	.19	0.99	.0156	-0.85	105.53
Perceptual Speed	104.15	17.15	.21	.05	.04	.04	1.08	.0136	0.49	20.09
Technical	129.72	22.39	.25	.06	.06	.06	1.07	.0124	0.29	29.05
General	56.17	7.81	.44	.19	.19	.19	0.99	.0622	-1.59	102.65
All Subtests			R = .51, R^2 = .26, R^2 cor = .22, Adj R^2 = .24							

Note. N = 426; Criterion Mean = 1.906; SD = 1.100.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-63. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Biology I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	96.88	15.71	.51	.26	.25	.26	1.06	.0399	-1.35	54.65
Verbal	142.57	24.57	.54	.29	.28	.29	1.03	.0271	-1.35	64.67
Math	100.71	15.89	.53	.29	.27	.28	1.04	.0413	-1.64	61.98
Mechanical Crafts	187.13	25.98	.32	.11	.09	.10	1.17	.0153	-0.35	18.23
Business & Clerical	150.50	20.66	.59	.34	.33	.34	1.00	.0348	-2.72	80.85
Electronics	192.83	27.57	.53	.28	.26	.27	1.05	.0235	-1.01	59.64
Health, Soc Tech	144.15	22.02	.47	.22	.20	.21	1.09	.0261	-1.24	43.27
AFQT	195.52	30.59	.57	.33	.32	.32	1.01	.0230	-1.98	75.70
Perceptual Speed	106.18	17.01	.38	.14	.13	.14	1.14	.0272	-0.37	25.63
Technical	137.66	20.18	.24	.06	.04	.05	1.19	.0148	0.47	9.80
General	60.49	7.68	.55	.30	.29	.30	1.03	.0877	-2.79	66.58
All Subtests			R = .67, R^2 = .45, R^2 cor = .36, Adj R^2 = .41							

Note. N = 157; Criterion Mean = 2.52; SD = 1.23.

Table A-64. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Biology I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	92.76	19.78	.51	.26	.25	.26	1.01	.0304	-0.42	76.14
Verbal	133.68	31.62	.49	.24	.23	.24	1.02	.0181	-0.02	66.78
Math	98.98	19.10	.53	.28	.27	.28	0.99	.0327	-0.83	84.46
Mechanical Crafts	184.67	32.46	.44	.20	.19	.19	1.05	.0160	-0.55	51.99
Business & Clerical	146.82	25.68	.51	.26	.25	.26	1.01	.0234	-1.03	76.05
Electronics	189.24	35.30	.52	.27	.26	.27	1.00	.0172	-0.86	78.28
Health, Soc Tech	138.89	27.63	.50	.25	.24	.25	1.01	.0214	-0.57	72.62
AFQT	187.08	39.48	.54	.29	.28	.28	0.99	.0159	-0.58	86.16
Perceptual Speed	107.43	16.69	.22	.05	.04	.05	1.14	.0157	0.71	11.26
Technical	135.96	24.99	.39	.15	.14	.15	1.08	.0183	-0.08	38.10
General	59.00	9.80	.51	.26	.25	.26	1.01	.0610	-1.20	75.18
All Subtests			R = .56, R^2 = .32, R^2 cor = .24, Adj R^2 = .28							

Note. N = 215; Criterion Mean = 2.40; SD = 1.17.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-65. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Physics I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	103.36	13.99	.27	.07	.06	.07	0.93	.0184	0.99	18.76
Verbal	151.72	21.09	.18	.03	.17	.03	0.95	.0082	1.64	8.14
Math	109.39	14.54	.32	.10	.09	.10	0.91	.0212	0.57	27.78
Mechanical Crafts	195.75	27.80	.11	.01	.00	.01	0.96	.0037	2.16	2.81[c]
Business & Clerical	161.51	16.21	.36	.13	.12	.13	0.90	.0213	-0.54	35.76
Electronics	207.80	25.47	.21	.04	.03	.04	0.94	.0079	1.25	11.16
Health, Soc Tech	152.57	20.76	.23	.05	.04	.05	0.94	.0105	1.28	13.21
AFQT	209.62	27.05	.29	.08	.07	.08	0.92	.0102	0.76	21.70
Perceptual Speed	112.97	12.18	.24	.06	.05	.05	0.93	.0189	0.75	14.78
Technical	142.50	22.84	.03	.00	-.01	.00	0.96	.0014	2.69	0.28[c]
General	64.20	6.66	.23	.05	.04	.05	0.94	.0332	0.76	13.54
All Subtests			R = .42, R^2 = .18, R^2 cor = .10, Adj R^2 = .14[c]							

Note. N = 244; Criterion Mean = 2.89; SD = .96.

Table A-66. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Physics I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	109.84	12.68	.37	.14	.12	.13	.93	.0289	-0.60	26.95
Verbal	162.60	18.63	.30	.09	.07	.08	.95	.0159	-0.01	16.72
Math	115.28	13.29	.42	.18	.16	.17	.90	.0316	-1.06	37.01
Mechanical Crafts	208.02	28.43	.15	.02	.01	.02	.99	.0054	1.46	4.15[c]
Business & Clerical	168.69	15.50	.34	.12	.10	.11	.94	.0220	-1.13	22.77
Electronics	219.89	23.86	.32	.11	.09	.10	.94	.0135	-0.39	20.16
Health, Soc Tech	162.43	19.37	.31	.10	.08	.09	.95	.0158	0.01	17.98
AFQT	222.91	24.32	.39	.15	.14	.15	.92	.0159	-0.95	30.31
Perceptual Speed	114.06	11.61	.06	.00	-.01	.00	1.00	.0051	2.00	0.62[c]
Technical	151.99	23.93	.07	.00	-.01	.00	.99	.0028	2.16	0.78[c]
General	67.70	6.20	.28	.08	.07	.08	.96	.0458	-0.52	15.17
All Subtests			R = .47, R^2 = .22, R^2 cor = .12, Adj R^2 = .18[c]							

Note. N = 173; Criterion Mean = 2.584; SD = .994.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-67. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, Chemistry I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	98.12	13.06	.42	.18	.16	.17	1.11	.0390	-1.35	28.91
Verbal	145.68	20.74	.29	.09	.07	.08	1.16	.0171	-0.01	12.58
Math	101.83	13.51	.49	.24	.22	.23	1.06	.0438	-1.98	42.16
Mechanical Crafts	185.78	23.34	.21	.04	.02	.04	1.19	.0108	0.47	6.14[c]
Business & Clerical	151.62	17.34	.46	.22	.20	.21	1.08	.0325	-2.45	37.21
Electronics	195.30	23.35	.39	.15	.13	.15	1.12	.0202	-1.47	24.08
Health, Soc Tech	145.48	18.52	.36	.13	.11	.12	1.14	.0236	-0.95	20.09
AFQT	198.35	24.79	.43	.18	.17	.18	1.10	.0210	-1.68	30.38
Perceptual Speed	105.23	14.48	.33	.11	.09	.10	1.15	.0276	-0.42	16.43
Technical	135.92	19.07	.07	.01	-.02	.00	1.21	.0047	1.85	0.73[c]
General	60.76	6.39	.37	.14	.12	.13	1.13	.0705	-1.80	21.58
All Subtests			R = .56, R^2 = .32, R^2 cor = .20, Adj R^2 = .26[c]							

Note. N = 137; Criterion Mean = 2.48; SD = 1.21.

Table A-68. ASVAB Short-Interval Validity Summary Statistics for Sophomores Academic Year 1984-85, Chemistry I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	101.96	13.47	.27	.07	.06	.07	1.03	.0210	0.50	13.12
Verbal	149.65	20.94	.22	.05	.03	.04	1.04	.0113	0.96	8.93
Math	106.38	13.79	.26	.07	.05	.06	1.03	.0201	0.51	12.54
Mechanical Crafts	189.11	24.23	.26	.07	.05	.06	1.03	.0115	0.48	12.58
Business & Clerical	157.33	15.30	.26	.07	.06	.07	1.03	.0188	-0.30	13.50
Electronics	202.13	23.94	.27	.08	.06	.07	1.03	.0123	0.17	14.14
Health, Soc Tech	149.20	18.98	.27	.07	.06	.07	1.03	.0153	0.37	13.74
AFQT	205.69	25.33	.27	.08	.06	.07	1.03	.0115	0.27	14.05
Perceptual Speed	110.24	12.59	.05	.00	.02	.00	1.07	.0039	2.21	0.37[c]
Technical	136.81	19.48	.23	.05	.04	.05	1.04	.0124	0.95	9.35
General	62.56	6.01	.28	.08	.06	.07	1.03	.0500	-0.48	14.93
All Subtests			R = .35, R^2 = .12, R^2 cor = .01, Adj R^2 = .07[c]							

Note. N = 175; Criterion Mean = 2.65; SD = 1.07.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-69. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Chemistry I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	99.39	12.91	.27	.08	.07	.07	1.07	.0236	-0.20	35.37
Verbal	147.65	19.76	.21	.05	.04	.04	1.09	.0121	0.36	21.03
Math	102.61	13.45	.33	.11	.10	.10	1.05	.0271	-0.63	52.22
Mechanical Crafts	189.37	23.72	.13	.02	.01	.02	1.10	.0062	0.97	7.86
Business & Clerical	153.79	15.31	.33	.11	.10	.10	1.05	.0237	-1.50	51.82
Electronics	198.05	22.70	.30	.09	.08	.09	1.06	.0145	-0.73	41.99
Health, Soc Tech	147.16	18.73	.22	.05	.04	.05	1.09	.0132	0.20	22.77
AFQT	200.16	24.17	.30	.09	.08	.09	1.06	.0137	-0.59	42.35
Perceptual Speed	109.06	13.56	.12	.02	.01	.01	1.11	.0101	1.05	6.64[c]
Technical	138.75	19.18	.05	.00	-.00	.00	1.11	.0031	1.72	1.22[c]
General	61.88	5.85	.25	.06	.06	.06	1.08	.0476	-0.80	29.11
All Subtests			R = .41, R^2 = .17, R^2 cor = .13, Adj R^2 = .15[c]							

Note. N = 438; Criterion Mean = 2.15; SD = 1.11.

Table A-70. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, Chemistry I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	100.66	14.23	.38	.14	.14	.14	0.99	.0283	-0.71	73.92
Verbal	148.17	22.19	.30	.09	.09	.09	1.02	.0146	-0.02	45.17
Math	105.80	14.42	.46	.21	.21	.21	0.95	.0343	-1.49	121.50
Mechanical Crafts	192.01	26.94	.20	.04	.04	.04	1.05	.0080	0.60	19.15
Business & Clerical	157.11	16.86	.41	.17	.16	.17	0.98	.0260	-1.94	90.04
Electronics	202.14	25.45	.35	.12	.12	.12	1.00	.0148	-0.85	63.30
Health, Soc Tech	148.87	20.25	.34	.11	.11	.11	1.01	.0178	-0.51	57.24
AFQT	203.85	27.32	.41	.17	.16	.17	0.98	.0161	-1.14	91.20
Perceptual Speed	111.16	12.76	.14	.02	.01	.02	1.06	.0116	0.85	8.69
Technical	140.37	21.90	.11	.00	.01	.01	1.06	.0053	1.39	5.40[c]
General	62.80	6.69	.34	.11	.11	.11	1.01	.0539	-1.25	57.53
All Subtests			R = .52, R^2 = .27, R^2 cor = .24, Adj R^2 = .25							

Note. N = 450; Criterion Mean = 2.14; SD = 1.07.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appedix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-71. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Chemistry I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	102.33	14.33	.31	.09	.08	.09	1.08	.0240	-0.15	15.33
Verbal	149.38	22.97	.25	.06	.05	.06	1.09	.0124	0.45	10.23
Math	107.75	15.00	.37	.13	.12	.13	1.05	.0275	-0.66	23.14
Mechanical Crafts	192.74	29.20	.18	.03	.01	.03	1.11	.0070	0.96	5.07[c]
Business & Clerical	159.22	17.19	.36	.13	.11	.12	1.05	.0235	-1.44	22.05
Electronics	204.72	28.23	.29	.09	.07	.08	1.08	.0117	-0.08	13.94
Health, Soc Tech	150.78	21.65	.28	.08	.06	.07	1.08	.0147	0.09	13.00
AFQT	207.35	27.96	.34	.12	.10	.11	1.06	.0137	-0.54	19.59
Perceptual Speed	110.86	13.18	.11	.01	-.01	.01	1.12	.0093	1.27	1.79[c]
Technical	140.22	22.90	.13	.02	.00	.01	1.12	.0063	1.42	2.48[c]
General	63.18	7.19	.28	.08	.06	.07	1.08	.0441	-0.48	12.84
All Subtests			R = .45, R^2 = .21, R^2 cor = .08, Adj R^2 = .15[c]							

Note. N = 151; Criterion Mean = 2.31; SD = 1.13.

Table A-72. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Chemistry I - II

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	102.18	15.83	.39	.15	.38	.14	0.98	.0257	-0.20	29.98
Verbal	148.06	24.14	.27	.07	.25	.06	1.02	.0116	0.71	13.01
Math	107.23	16.92	.49	.24	.48	.24	0.92	.0307	-0.87	55.19
Mechanical Crafts	194.92	30.59	.30	.09	.29	.09	1.01	.0105	0.38	17.48
Business & Clerical	159.42	19.88	.38	.15	.37	.14	0.98	.0204	-0.82	29.74
Electronics	202.66	29.21	.40	.16	.39	.16	0.97	.0145	-0.51	33.04
Health, Soc Tech	151.36	23.22	.36	.13	.34	.12	0.99	.0161	-0.02	24.80
AFQT	206.02	31.03	.41	.17	.40	.17	0.96	.0140	-0.46	35.24
Perceptual Speed	111.83	14.58	.12	.01	.10	.01	1.05	.0085	1.48	2.40[c]
Technical	142.13	24.55	.22	.05	.21	.04	1.03	.0095	1.08	8.81
General	63.23	7.78	.36	.13	.11	.12	0.99	.0488	-0.66	25.58
All Subtests			R = .52, R^2 = .27, R^2 cor = .18, Adj R^2 = .23[c]							

Note. N = 174; Criterion Mean = 2.43; SD = 1.06.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-73. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Secretary and Office Education

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	89.37	12.78	.45	.20	.19	.20	1.02	.0402	-1.11	39.25
Verbal	132.52	20.38	.39	.15	.13	.14	1.05	.0215	-0.38	26.83
Math	92.02	12.42	.47	.22	.21	.22	1.00	.0433	-1.50	44.11
Mechanical Crafts	170.75	20.94	.28	.08	.06	.07	1.09	.0152	-0.12	13.07
Business & Clerical	143.03	16.43	.50	.25	.23	.24	0.99	.0345	-2.45	50.54
Electronics	177.78	21.32	.40	.16	.14	.15	1.04	.0213	-1.30	28.98
Health, Soc Tech	131.97	18.22	.44	.19	.17	.18	1.03	.0271	-1.10	35.71
AFQT	180.11	24.22	.48	.23	.21	.23	1.00	.0227	-1.61	46.62
Perceptual Speed	107.73	12.92	.26	.07	.05	.06	1.01	.0230	0.01	11.25
Technical	125.42	16.50	.18	.03	.01	.03	1.12	.0126	0.90	5.28[c]
General	56.64	5.92	.43	.19	17	.18	1.03	.0829	-2.22	35.15
All Subtests				R = .54, R^2 = .29, R^2 cor = .19, Adj R^2 = .25						

Note. N = 155; Criterion Mean = 2.48; SD = 1.14.

Table A-74. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Secretary and Office Education

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	91.68	13.13	.31	.09	.08	.09	0.91	.0222	0.71	23.32
Verbal	134.54	20.62	.28	.08	.07	.08	0.92	.0130	1.00	19.52
Math	94.65	13.96	.37	.14	.12	.13	0.89	.0251	0.37	35.53
Mechunical Crafts	174.82	20.51	.18	.03	.02	.03	0.94	.0084	1.29	7.57
Business & Clerical	146.31	17.22	.43	.18	.17	.18	0.87	.0235	-0.70	50.04
Electronics	181.84	22.19	.30	.09	.08	.09	0.91	.0130	0.38	23.03
Health, Soc Tech	135.26	17.56	.32	.10	.09	.10	0.90	.0176	0.37	26.57
AFQT	184.11	25.61	.35	.12	.11	.12	0.90	.0130	0.36	31.26
Perceptual Speed	108.83	13.81	.27	.07	.06	.07	0.92	.0188	0.70	18.17
Technical	127.87	15.93	.10	.01	.00	.01	0.95	.0059	1.99	2.22[c]
General	57.71	5.99	.34	.12	.10	.11	0.90	.0542	-0.38	29.85
All Subtests				R = .49, R^2 = .24, R^2 cor = .16, Adj R^2 = .20[c]						

Note. N = 229; Criterion Mean = 2.75; SD = .95.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-75. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Secretary and Office Education

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	93.28	13.67	.33	.11	.10	.11	0.95	.0243	0.49	28.64
Verbal	135.56	20.35	.29	.09	.07	.08	0.96	.0144	0.81	21.62
Math	94.78	13.26	.32	.11	.09	.10	0.95	.0246	0.43	27.30
Mechanical Crafts	176.62	21.27	.18	.03	.02	.03	0.99	.0086	1.25	7.92
Business & Clerical	145.18	18.64	.23	.05	.04	.05	0.98	.0125	0.94	13.30
Electronics	181.53	21.51	.28	.08	.07	.08	0.96	.0133	0.35	20.47
Health, Soc Tech	137.09	18.92	.30	.09	.08	.08	0.96	.0157	0.60	22.39
AFQT	186.08	25.55	.33	.11	.10	.11	0.95	.0130	0.34	28.60
Perceptual Speed	106.59	15.11	.15	.02	.01	.02	0.99	.0100	1.69	5.39[c]
Technical	128.99	16.71	.08	.01	-.01	.00	1.00	.0051	2.11	1.67[c]
General	57.76	6.28	.29	.08	.07	.08	0.96	.0457	0.12	20.65
All Subtests			R = .42, R^2 = .17, R^2 cor = .10, Adj R^2 = .14[c]							

Note. N = 234; Criterion Mean = 2.76; SD = 1.00.

Table A-76. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Accounting and Bookkeeping

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	91.90	13.70	.39	.15	.14	.15	1.08	.0334	-0.51	56.59
Verbal	136.14	20.87	.36	.13	.12	.13	1.10	.0203	-0.20	47.04
Math	95.00	13.17	.40	.16	.15	.16	1.08	.0358	-0.85	60.83
Mechanical Crafts	176.19	21.96	.24	.06	.05	.06	1.14	.0131	0.25	20.05
Business & Clerical	146.00	12.32	.40	.16	.15	.16	1.08	.0285	-1.61	58.98
Electronics	183.10	22.14	.37	.13	.13	.13	1.09	.0193	-0.99	48.48
Health, Soc Tech	136.06	18.73	.36	.13	.12	.12	1.10	.0222	-0.47	45.51
AFQT	185.17	25.52	.42	.17	.17	.17	1.07	.0191	-0.98	65.62
Perceptual Speed	108.49	13.45	.16	.02	.02	.02	1.16	.0135	1.09	7.77
Technical	129.38	16.85	.16	.03	.02	.02	1.16	.0110	1.13	8.12
General	58.12	5.97	.38	.14	.14	.14	1.09	.0743	-1.76	52.50
All Subtests			R = .45, R^2 = .21, R^2 cor = .15, Adj R^2 = .18							

Note. N = 317; Criterion Mean = 2.56; SD = 1.17.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-77. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, Accounting and Bookkeeping

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	92.15	14.08	.45	.20	.19	.20	1.12	.0397	-1.31	61.38
Verbal	135.79	22.36	.42	.18	.17	.17	1.14	.0236	-0.86	53.23
Math	95.92	14.48	.46	.21	.20	.20	1.12	.0393	-1.43	64.22
Mechanical Crafts	180.50	25.16	.16	.02	.01	.02	1.24	.0078	0.93	6.24[c]
Business & Clerical	146.98	18.05	.51	.26	.25	.26	1.08	.0354	-2.86	86.93
Electronics	185.87	24.28	.39	.15	.14	.15	1.15	.0200	-1.38	43.96
Health, Soc Tech	136.96	19.91	.39	.15	.14	.15	1.15	.0244	-1.00	43.64
AFQT	185.41	27.69	.47	.22	.21	.22	1.10	.0213	-1.61	70.73
Perceptual Speed	108.96	14.54	.28	.08	.07	.07	1.20	.0238	-0.25	20.44
Technical	133.09	20.32	.04	.00	-.01	.00	1.25	.0028	1.98	0.50[c]
General	58.69	6.68	.40	.16	.15	.16	1.15	.0751	-2.07	47.31
All Subtests			R = .62, R^2 = .39, R^2 cor = .33, Adj R^2 = .36[c]							

Note. N = 248; Criterion Mean = 2.34; SD = 1.25.

Table A-78. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Accounting and Bookkeeping

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	95.41	13.39	.27	.07	.06	.07	1.15	.0239	0.54	15.27
Verbal	139.69	21.57	.26	.07	.05	.06	1.16	.0143	0.81	14.20
Math	99.23	13.77	.36	.13	.11	.12	1.12	.0309	-0.25	28.67
Mechanical Crafts	181.91	24.47	.15	.02	.01	.02	1.18	.0075	1.45	4.82[c]
Business & Clerical	150.50	16.42	.42	.18	.16	.17	1.09	.0306	-1.79	42.46
Electronics	189.76	23.54	.32	.10	.09	.10	1.14	.0161	-0.25	22.23
Health, Soc Tech	140.64	19.09	.25	.06	.05	.06	1.16	.0154	0.65	12.70
AFQT	192.13	25.62	.33	.11	.09	.10	1.13	.0152	-0.10	23.48
Perceptual Speed	109.24	12.94	.27	.07	.06	.07	1.15	.0250	0.09	15.65
Technical	132.96	19.64	.10	.01	-.01	.00	1.19	.0059	2.03	1.89[c]
General	59.67	6.33	.32	.10	.09	.10	1.14	.0596	-0.74	21.94
All Subtests			R = .51, R^2 = .26, R^2 cor = .17, Adj R^2 = .22[c]							

Note. N = 200; Criterion Mean = 2.82; SD = 1.20.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-79. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Accounting and Bookkeeping

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	97.90	14.80	.41	.17	.16	.16	1.06	.0321	-0.58	51.50
Verbal	143.16	21.95	.32	.10	.09	.10	1.10	.0169	0.15	28.98
Math	99.90	15.87	.42	.18	.17	.18	1.05	.0310	-0.53	56.17
Mechanical Crafts	185.68	25.40	.21	.04	.03	.04	1.14	.0096	0.79	11.75
Business & Clerical	151.12	19.49	.42	.18	.17	.18	1.05	.0250	-1.25	55.98
Electronics	192.13	26.29	.35	.12	.11	.12	1.09	.0153	-0.37	34.77
Health, Soc Tech	143.76	20.76	.36	.13	.12	.12	1.08	.0200	-0.31	37.64
AFQT	195.71	28.94	.41	.17	.16	.16	1.06	.0164	-0.64	51.27
Perceptual Speed	108.68	14.02	.32	.10	.09	.10	1.10	.0265	-0.32	29.25
Technical	135.69	20.55	.09	.01	.00	.00	1.16	.0050	1.89	2.01[c]
General	60.50	7.15	.35	.13	.11	.12	1.09	.0575	-0.91	36.78
All Subtests			R = .48, R^2 = .23, R^2 cor = .16, Adj R^2 = .20[c]							

Note. N = 258; Criterion Mean = 2.56; SD = 1.16.

Table A-80. ASVAB Short-Interval Validity Summary Statistics for Freshman
Academic Year 1984-85, Typing and Word Processing

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	85.64	14.43	.46	.21	.21	.21	1.00	.0359	-1.07	141.20
Verbal	125.02	24.25	.46	.21	.20	.21	1.00	.0211	-0.63	136.85
Math	89.60	12.81	.46	.20	.19	.20	1.01	.0391	-1.50	129.62
Mechanical Crafts	168.70	23.63	.36	.13	.12	.13	1.05	.0170	-0.87	76.79
Business & Clerical	133.60	16.90	.54	.29	.29	.29	0.95	.0358	-2.77	212.97
Electronics	171.71	24.27	.44	.19	.19	.19	1.01	.0203	-1.49	125.31
Health, Soc Tech	128.61	20.43	.45	.21	.20	.20	1.00	.0249	-1.20	135.39
AFQT	172.09	27.29	.48	.23	.23	.23	0.99	.0198	-1.40	157.20
Perceptual Speed	97.65	14.54	.34	.11	.11	.11	1.06	.0261	-0.54	67.24
Technical	124.31	18.29	.30	.09	.09	.09	1.07	.0185	-0.29	52.07
General	54.14	6.96	.49	.24	.24	.24	0.98	.0793	-2.29	167.10
All Subtests			R = .55, R^2 = .30, R^2 cor = .27, Adj R^2 = .29							

Note. N = 526; Criterion Mean = 2.00; SD = 1.12.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-81. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, Typing and Word Processing

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	83.39	12.87	.36	.13	.12	.13	1.00	.0298	-0.31	74.32
Verbal	121.68	21.11	.32	.10	.10	.10	1.02	.0161	0.21	56.87
Math	87.63	11.45	.39	.15	.14	.15	0.99	.0362	-0.99	88.94
Mechanical Crafts	163.74	19.83	.26	.07	.06	.07	1.04	.0142	-0.15	37.58
Business & Clerical	132.93	16.10	.43	.18	.18	.18	0.97	.0284	-1.60	112.52
Electronics	167.92	20.72	.34	.12	.11	.11	1.01	.0177	-0.79	66.82
Health, Soc Tech	124.81	17.82	.36	.13	.13	.13	1.00	.0219	-0.55	77.20
AFQT	168.45	24.10	.39	.15	.15	.15	0.99	.0172	-0.73	89.47
Perceptual Speed	98.49	15.78	.25	.06	.06	.06	1.04	.0172	0.48	34.59
Technical	120.76	15.37	.20	.04	.03	.04	1.05	.0139	0.50	20.97
General	53.10	5.92	.39	.15	.14	.15	0.99	.0699	-1.54	88.83
All Subtests			R = .46, R^2 = .22, R^2 cor = .18, Adj R^2 = .20							

Note. N = 509; Criterion Mean = 2.18; SD = 1.07.

Table A-82. ASVAB Short-Interval Validity Summary Statistics for Sophomores Academic Year 1984-85, Typing and Word Processing

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	88.77	14.09	.38	.14	.14	.14	1.01	.0292	-0.30	111.42
Verbal	130.27	23.10	.32	.10	.10	.10	1.03	.0152	0.31	78.13
Math	92.88	13.13	.41	.17	.16	.16	1.00	.0338	-0.85	132.99
Mechanical Crafts	173.19	24.27	.20	.04	.04	.04	1.07	.0092	0.71	29.01
Business & Clerical	141.13	17.53	.46	.21	.21	.20	0.97	.0284	-1.72	176.80
Electronics	178.27	24.00	.34	.11	.11	.11	1.03	.0153	-0.44	86.13
Health, Soc Tech	132.29	19.96	.34	.12	.12	.12	1.03	.0188	-0.20	90.33
AFQT	179.22	26.82	.41	.16	.16	.16	1.00	.0165	-0.67	132.24
Perceptual Speed	103.73	15.23	.29	.08	.08	.08	1.05	.0208	0.14	61.58
Technical	127.60	19.25	.12	.02	.01	.01	1.08	.0070	1.39	10.55
General	56.32	6.67	.37	.14	.13	.14	1.01	.0607	-1.13	107.17
All Subtests			R = .50, R^2 = .25, R^2 cor = .22, Adj R^2 = .27							

Note. N = 674; Criterion Mean = 2.29; SD = 1.09.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-83. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Typing and Word Processing

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	87.80	13.47	.37	.13	.13	.13	0.97	.0284	-0.09	65.02
Verbal	127.97	22.07	.32	.10	.09	.10	0.99	.0149	0.49	46.53
Math	92.31	12.42	.38	.15	.14	.15	0.96	.0323	-0.58	73.10
Mechanical Crafts	173.70	23.59	.26	.07	.06	.06	1.01	.0114	0.43	29.72
Business & Clerical	139.94	17.13	.36	.13	.12	.13	0.97	.0220	-0.67	62.78
Electronics	177.41	22.54	.33	.11	.10	.10	0.99	.0151	-0.27	49.74
Health, Soc Tech	131.54	19.21	.35	.12	.12	.12	0.98	.0190	-0.10	58.52
AFQT	177.05	25.56	.40	.16	.15	.16	0.96	.0164	-0.49	80.42
Perceptual Speed	104.36	15.41	.09	.01	.00	.01	1.04	.0064	1.74	3.77[c]
Technical	128.28	19.11	.20	.04	.03	.04	1.02	.0110	0.99	17.95
General	56.10	6.33	.35	.12	.11	.12	0.98	.0569	-0.79	56.97
All Subtests			R = .44, R^2 = .20, R^2 cor = .15, Adj R^2 = .18[c]							

Note. N = 423; Criterion Mean = 2.40; SD = 1.04.

Table A-84. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, Typing and Word Processing

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	91.74	15.81	.39	.15	.14	.15	1.03	.0273	-0.19	71.72
Verbal	134.84	24.54	.33	.11	.10	.11	1.06	.0151	0.28	50.44
Math	95.48	15.71	.39	.15	.15	.15	1.03	.0278	-0.34	73.74
Mechanical Crafts	179.96	27.75	.21	.04	.04	.04	1.10	.0084	0.81	18.49
Business & Clerical	144.85	18.91	.43	.19	.18	.19	1.01	.0256	-1.40	94.68
Electronics	184.72	27.66	.32	.10	.10	.10	1.06	.0130	-0.09	47.18
Health, Soc Tech	136.57	22.28	.35	.13	.12	.12	1.05	.0178	-0.12	59.03
AFQT	184.58	30.47	.40	.16	.16	.16	1.03	.0147	-0.41	78.75
Perceptual Speed	105.88	15.60	.29	.09	.08	.08	1.07	.0211	0.08	38.77
Technical	132.77	22.07	.12	.02	.01	.01	1.11	.0062	1.49	6.28[c]
General	58.14	7.50	.36	.13	.13	.12	1.04	.0543	-0.84	62.64
All Subtests			R = .50, R^2 = .25, R^2 cor = .21, Adj R^2 = .23							

Note. N = 412; Criterion Mean = 2.31; SD = 1.12.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-85. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Typing and Word Processing

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F
Academic Ability	91.00	14.87	.35	.12	.11	.12	1.05	.0262	0.20	32.76
Verbal	133.59	23.77	.28	.08	.07	.07	1.07	.0131	0.84	20.02
Math	95.35	14.66	.36	.13	.12	.13	1.04	.0276	-0.04"	35.53
Mechanical Crafts	179.00	26.71	.23	.05	.04	.05	1.09	.0095	0.89	12.91
Business & Clerical	144.59	18.70	.36	.13	.12	.13	1.04	.0215	-0.52	35.22
Electronics	183.65	25.40	.31	.09	.08	.09	1.06	.0134	0.13	24.24
Health, Soc Tech	135.74	21.14	.33	.11	.10	.10	1.05	.0173	0.25	28.21
AFQT	183.97	28.64	.36	.13	.12	.12	1.04	.0139	0.04	34.25
Perceptual Speed	105.61	15.61	.23	.05	.04	.05	1.09	.0165	0.85	12.55
Technical	132.31	21.05	.16	.03	.01	.02	1.10	.0084	1.48	6.09[c]
General	57.86	7.01	.34	.11	.10	.11	1.05	.0537	-0.51	30.24
All Subtests			R = .43, R^2 = .19, R^2 cor = .11, Adj R^2 = .15							

Note. N = 237; Criterion Mean = 2.59; SD = 1.12.

Table A-86. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Typing and Word Processing

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	93.47	15.58	.42	.17	.16	.17	0.92	.0270	0.08	48.10
Verbal	136.86	25.08	.37	.14	.13	.14	0.94	.0150	0.54	37.10
Math	96.60	15.50	.41	.17	.16	.16	0.92	.0267	0.02	46.25
Mechanical Crafts	183.90	27.76	.23	.05	.04	.05	0.99	.0082	1.09	12.34
Business & Clerical	146.23	19.93	.41	.16	.15	.16	0.93	.0206	-0.41	45.33
Electronics	187.28	28.05	.36	.13	.12	.12	0.95	.0129	0.18	33.84
Health, Soc Tech	139.67	22.59	.36	.13	.12	.12	0.95	.0159	0.38	33.37
AFQT	187.69	29.83	.42	.18	.17	.17	0.92	.0143	-0.08	49.67
Perceptual Speed	105.84	15.77	.27	.07	.06	.07	0.98	.0171	0.79	17.59
Technical	135.97	22.18	.13	.02	.00	.01	1.00	.0060	1.79	3.99[c]
General	58.94	7.78	.37	.14	.13	.939	0.14	.0484	-0.25	37.10
All Subtests			R = .49, R^2 = .24, R^2 cor = -.07, Adj R^2 = .21[c]							

Note. N = 232; Criterion Mean = 2.60; SD = 1.01.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

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Table A-87. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, Business Math

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	80.49	10.47	.19	.03	.01	.03	0.94	.0169	0.42	4.50[c]
Verbal	117.04	17.11	.04	.00	-.02	-.01	0.96	.0025	1.49	0.25[c]
Math	85.59	9.92	.30	.09	.07	.08	0.92	.0287	-0.67	12.27
Mechanical Crafts	161.06	18.39	.14	.02	-.00	.11	0.95	.0073	0.61	2.54[c]
Business & Clerical	130.50	14.49	.22	.05	.03	.04	0.94	.0144	-0.09	6.28[c]
Electronics	163.80	16.65	.16	.03	.00	.02	0.95	.0091	0.29	3.27[c]
Health, Soc Tech	121.13	14.86	.21	.04	.02	.03	0.94	.0132	0.18	5.56[c]
AFQT	163.38	19.61	.18	.03	.01	.03	0.94	.0088	0.34	4.26[c]
Perceptual Speed	97.45	15.74	.14	.02	-.00	.01	0.95	.0086	0.94	2.60[c]
Technical	119.45	15.16	.06	.00	-.02	.00	0.96	.0039	1.32	0.48[c]
General	51.92	5.08	.17	.03	.00	.02	0.95	.0311	0.16	3.55[c]
All Subtests			R = .40, R^2 = .16, R^2 cor = .01, Adj R^2 = .09[c]							

Note. N = 128; Criterion Mean = 1.78; SD = 0.96.

Table A-88. ASVAB Short-Interval Validity Summary Statistics for Sophomores Academic Year 1984-85, Business Math

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	86.32	11.81	.15	.02	-.01	.01	1.04	.0134	0.93	2.04[c]
Verbal	126.86	17.95	.09	.01	-.02	.00	1.05	.0051	1.43	0.76[c]
Math	90.00	11.06	.19	.03	.01	.02	1.03	.0176	0.50	3.55[c]
Mechanical Crafts	170.69	22.86	.19	.04	.01	.03	1.03	.0086	0.61	3.61[c]
Business & Clerical	139.45	14.88	.15	.02	-.01	.01	1.04	.0104	0.63	2.20[c]
Electronics	173.61	20.79	.19	.04	.01	.03	1.03	.0094	0.44	3.62[c]
Health, Soc Tech	128.94	16.63	.16	.03	.01	.02	1.04	.0101	0.77	2.64[c]
AFQT	173.17	20.69	.15	.02	-.01	.01	1.04	.0075	0.78	2.24[c]
Perceptual Speed	105.76	16.21	.09	.07	-.02	.00	1.05	.0056	1.49	0.75[c]
Technical	125.96	18.56	.16	.03	-.00	.02	1.04	.0092	0.93	2.68[c]
General	55.47	5.50	.18	.03	.00	.02	1.03	.0336	0.21	3.29[c]
All Subtests			R = .23, R^2 = .05, R^2 cor = -.18, Adj R^2 = .00[c]							

Note. N = 101; Criterion Mean = 2.08; SD = 1.05.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-89. ASVAB Short-Interval Validity Summary Statistics for Freshman Academic Year 1984-85, Shop

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	84.63	13.94	.43	.18	.18	.18	0.98	.0330	-0.24	117.23
Verbal	124.55	23.38	.41	.17	.17	.17	0.98	.0191	0.18	108.64
Math	88.11	12.47	.42	.18	.17	.18	0.98	.0364	-0.65	112.95
Mechanical Crafts	174.99	23.03	.40	.16	.15	.15	0.99	.0185	-0.68	97.60
Business & Clerical	127.49	18.08	.47	.22	.22	.22	0.95	.0282	-1.04	152.00
Electronics	173.10	23.92	.46	.21	.21	.21	0.96	.0206	-1.01	139.49
Health, Soc Tech	128.93	20.11	.42	.18	.17	.17	0.98	.0225	-0.34	111.91
AFQT	169.39	26.44	.43	.19	.18	.19	0.93	.0176	-0.43	120.64
Perceptual Speed	89.90	15.51	.41	.17	.16	.16	0.99	.0283	0.01	104.70
Technical	131.00	18.43	.34	.12	.11	.11	1.02	.0198	-0.04	68.34
General	53.86	7.24	.48	.23	.22	.22	0.95	.0707	-1.25	152.87
All Subtests			R = .51, R^2 = .26, R^2 cor = .23, Adj R^2 = .25							

Note. N = 528; Criterion Mean = 2.56; SD = 1.08.

Table A-90. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, Shop

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	83.70	13.89	.34	.12	.10	.11	1.00	.0260	0.15	30.05
Verbal	122.72	22.26	.30	.09	.08	.08	1.02	.0142	0.58	22.42
Math	87.32	12.95	.33	.11	.09	.10	1.01	.0267	-0.01	27.24
Mechanical Crafts	174.45	24.02	.38	.14	.13	.14	0.99	.0166	-0.57	37.74
Business & Clerical	126.34	17.09	.31	.10	.09	.09	1.01	.0196	-0.15	25.23
Electronics	171.63	23.94	.37	.13	.12	.13	0.99	.0163	-0.47	35.62
Health, Soc Tech	127.51	20.47	.34	.12	.11	.11	1.00	.0179	0.04	30.99
AFQT	167.58	26.04	.35	.12	.11	.12	1.00	.0141	-0.04	31.22
Perceptual Speed	88.41	14.91	.16	.02	.01	.02	1.05	.0112	1.34	5.79[c]
Technical	130.88	19.01	.35	.12	.11	.12	1.00	.0197	-0.25	32.57
General	53.33	7.20	.35	.12	.11	.12	1.00	.0517	-0.43	32.05
All Subtests			R = .41, R^2 = .17, R^2 cor = .08, Adj R^2 = .13							

Note. N = 233; Criterion Mean = 2.33; SD = 1.07.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-91. ASVAB Short-Interval Validity Summary Statistics for Sophomores
Academic Year 1984-85, Shop

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	86.76	14.38	.31	.10	.09	.09	1.15	.0261	-0.06	26.96
Verbal	128.53	23.45	.27	.08	.06	.07	1.16	.0141	0.39	20.50
Math	90.07	13.22	.36	.13	.12	.13	1.13	.0330	-0.77	37.83
Mechanical Crafts	183.79	25.98	.35	.12	.11	.12	1.14	.0162	-0.77	34.84
Business & Clerical	132.40	19.75	.35	.12	.11	.12	1.13	.0212	-0.61	34.61
Electronics	179.21	24.84	.36	.13	.12	.13	1.13	.0174	-0.92	37.30
Health, Soc Tech	132.95	21.26	.34	.12	.11	.11	1.14	.0194	-0.37	33.19
AFQT	173.61	27.29	.34	.11	.10	.11	1.14	.0150	-0.40	32.59
Perceptual Speed	93.43	18.27	.25	.06	.05	.06	1.17	.0166	0.65	17.11
Technical	138.80	20.58	.33	.11	.11	.11	1.14	.0194	-0.49	31.01
General	55.95	7.65	.37	.14	.13	.13	1.13	.0581	-1.05	39.58
All Subtests			R = .42, R^2 = .18, R^2 cor = .11, Adj R^2 = .14							

Note. N = 255; Criterion Mean = 2.20; SD = 1.21.

Table A-92. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Shop

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	90.47	13.70	.12	.04	.02	.01	1.11	.0095	1.59	2.03[c]
Verbal	133.52	22.47	.10	.01	-.01	.00	1.11	.0049	1.80	1.43[c]
Math	93.35	13.12	.21	.04	.03	.04	1.09	.0179	0.78	6.75[c]
Mechanical Crafts	188.67	26.47	.22	.05	.03	.04	1.09	.0091	0.74	7.06
Business & Clerical	136.95	18.87	.16	.03	.01	.02	1.10	.0096	1.14	3.92[c]
Electronics	184.56	25.04	.19	.04	.02	.03	1.10	.0083	0.91	5.28[c]
Health, Soc Tech	137.80	20.66	.16	.03	.01	.02	1.10	.0085	1.27	3.75[c]
AFQT	180.76	26.27	.15	.02	.00	.02	1.10	.0064	1.29	3.40[c]
Perceptual Speed	96.40	16.29	.07	.01	-.02	.00	1.11	.0051	1.96	0.81[c]
Technical	141.91	21.25	.22	.05	.03	.04	1.09	.0116	0.81	7.46
General	57.75	7.33	.18	.03	.01	.03	1.10	.0279	0.84	5.09[c]
All Subtests			R = .36, R^2 = .13, R^2 cor = .01, Adj R^2 = .07[c]							

Note. N = 147; Criterion Mean = 2.45; SD = 1.11.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-93. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, Shop

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	88.91	14.27	.17	.03	.00	.02	1.02	.0120	1.36	3.26[c]
Verbal	131.77	24.41	.20	.04	.02	.03	1.01	.0084	1.32	4.80[c]
Math	91.32	13.15	.15	.02	-.00	.02	1.02	.0121	1.33	2.81[c]
Mechanical Crafts	192.55	27.81	.21	.05	.02	.04	1.01	.0079	0.92	5.43[c]
Business & Clerical	134.14	18.89	.22	.05	.03	.04	1.01	.0122	0.79	6.11[c]
Electronics	182.91	26.09	.23	.05	.03	.04	1.01	.0089	0.80	6.16[c]
Health, Soc Tech	137.11	21.43	.21	.04	.02	.04	1.01	.0101	1.05	5.30[c]
AFQT	177.30	27.16	.17	.03	.00	.02	1.02	.0064	1.29	3.40[c]
Perceptual Speed	94.76	16.31	.22	.05	.03	.04	1.01	.0141	1.09	6.08[c]
Technical	146.63	22.70	.21	.05	.02	.04	1.01	.0096	1.02	5.44[c]
General	57.62	7.99	.24	.07	.03	.05	1.00	.0307	0.66	6.92[c]
All Subtests			R = .33, R^2 = .11, R^2 cor = .08, Adj R^2 = .02[c]							

Note. N = 117; Criterion Mean = 2.43; SD = 1.03.

Table A-94. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Shop

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	92.43	14.91	.15	.02	-.01	.01	1.15	.0114	1.43	2.30[c]
Verbal	136.82	23.39	.10	.01	-.02	.00	1.15	.0051	1.78	1.13[c]
Math	95.34	15.36	.21	.05	.02	.04	1.13	.0161	0.95	4.95[c]
Mechanical Crafts	198.52	27.52	.26	.07	.04	.06	1.12	.0107	0.36	7.16
Business & Clerical	139.51	19.04	.21	.04	.02	.03	1.13	.0126	0.73	4.64[c]
Electronics	190.70	26.75	.19	.04	.01	.03	1.14	.0083	0.91	3.95[c]
Health, Soc Tech	142.45	22.04	.24	.06	.03	.05	1.13	.0124	0.73	6.08[c]
AFQT	184.98	29.08	.17	.03	.00	.02	1.14	.0067	1.25	3.03[c]
Perceptual Speed	97.88	14.12	.12	.02	-.01	.01	1.15	.0101	1.49	1.61[c]
Technical	150.91	22.26	.25	.06	.04	.05	1.12	.0131	0.51	7.02
General	59.70	7.70	.21	.04	.02	.04	1.13	.0316	0.60	4.79[c]
All Subtests			R = .42, R^2 = .18, R^2 cor = -.01, Adj R^2 = .09[c]							

Note. N = 105; Criterion Mean = 2.49; SD = 1.15.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-95. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Shop

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	90.61	16.62	.33	.11	.08	.10	0.90	.0189	0.84	13.32
Verbal	133.31	26.33	.30	.09	.06	.08	0.91	.0108	1.11	10.67
Math	92.56	16.22	.30	.09	.06	.08	0.91	.0174	0.94	10.49
Mechanical Crafts	194.20	31.13	.36	.13	.11	.12	0.89	.0110	0.41	16.32
Business & Clerical	139.05	23.72	.26	.07	.04	.06	0.92	.0104	1.11	7.82
Electronics	186.43	29.73	.36	.13	.11	.12	0.89	.0115	0.40	16.30
Health, Soc Tech	138.38	24.11	.32	.11	.08	.10	0.90	.0128	0.78	12.85
AFQT	180.87	32.11	.31	.10	.07	.09	0.91	.0092	0.88	11.66
Perceptual Speed	99.54	19.55	.17	.03	.00	.02	0.94	.0082	1.73	3.21[c]
Technical	147.74	24.86	.34	.11	.09	.10	0.90	.0128	0.65	13.81
General	58.65	9.12	.34	.11	.09	.10	0.90	.0350	0.50	13.80
All Subtests			R = .42, R^2 = .18, R^2 cor = .00. Adj R^2 = .10[c]							

Note. N = 111; Criterion Mean = 2.55; SD = .95.

Table A-96. ASVAB Short-Interval Validity Summary Statistics for Freshman
Academic Year 1984-85, Home Economics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	82.61	12.40	.41	.17	.17	.17	1.09	.0398	-0.52	115.88
Verbal	121.31	20.51	.42	.18	.17	.18	1.08	.0244	-0.20	120.70
Math	87.15	11.47	.42	.17	.17	.17	1.08	.0434	-1.01	118.67
Mechanical Crafts	161.76	17.58	.33	.11	.11	.11	1.13	.0224	-0.86	69.11
Business & Clerical	131.25	17.33	.51	.26	.26	.26	1.02	.0353	-1.86	200.63
Electronics	167.26	20.19	.45	.20	.20	.20	1.07	.0265	-1.66	141.70
Health, Soc Tech	123.26	16.68	.40	.16	.15	.16	1.10	.0283	0.72	104.54
AFQT	167.08	23.74	.44	.19	.19	.19	1.07	.0221	-0.93	135.65
Perceptual Speed	96.63	16.58	.42	.18	.18	.18	1.08	.0305	-0.18	123.39
Technical	119.11	13.53	.26	.07	.06	.07	1.15	.0230	0.03	41.11
General	52.59	6.04	.49	.24	.24	.24	1.04	.0973	-2.35	180.29
All Subtests			R = .54, R^2 = .29, R^2 cor = .26, Adj R^2 = .28							

Note. N = 564; Criterion Mean = 2.77; SD = 1.19.

[a] r^2 cor = corrected r2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-97. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, Home Economics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	81.20	12.53	.34	.11	.11	.11	1.05	.0301	-0.03	40.85
Verbal	118.69	20.06	.33	.11	.10	.11	1.06	.0184	0.23	39.06
Math	85.65	11.38	.30	.09	.08	.09	1.07	.0298	-0.13	32.23
Mechanical Crafts	161.51	18.46	.24	.06	.05	.06	1.08	.0151	-0.02	21.01
Business & Clerical	127.89	16.71	.38	.15	.14	.14	1.03	.0256	-0.86	54.78
Electronics	164.53	20.00	.33	.11	.10	.10	1.06	.0182	-0.59	38.02
Health, Soc Tech	121.78	17.17	.32	.10	.09	.10	1.06	.0207	-0.11	35.87
AFQT	163.95	23.60	.35	.12	.11	.12	1.05	.0165	-0.29	43.87
Perceptual Speed	93.31	16.45	.30	.09	.08	.09	1.07	.0205	0.51	31.82
Technical	119.46	14.53	.19	.04	.03	.03	1.10	.0146	0.68	11.82
General	51.72	6.01	.37	.14	.13	.13	1.04	.0686	-1.13	50.23
All Subtests			R = .40, R^2 = .16, R^2 cor = .10, Adj R^2 = .13							

Note. N = 320; Criterion Mean = 2.42; SD = 1.12.

Table A-98. ASVAB Short-Interval Validity Summary Statistics for Sophomores Academic Year 1984-85, Home Economics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	85.65	14.40	.34	.12	.11	.11	1.13	.0285	0.02	43.72
Verbal	125.13	23.69	.30	.09	.08	.09	1.15	.0153	0.54	33.31
Math	89.69	13.39	.38	.14	.13	.14	1.12	.0339	-0.58	55.04
Mechanical Crafts	170.22	22.86	.25	.06	.06	.06	1.17	.0133	0.19	22.76
Business & Clerical	135.69	20.26	.39	.15	.14	.15	1.12	.0230	-0.66	58.81
Electronics	173.33	24.00	.33	.11	.10	.11	1.14	.0168	-0.45	42.16
Health, Soc Tech	128.09	20.33	.34	.12	.11	.11	1.14	.0203	-0.14	44.17
AFQT	172.56	27.84	.36	.13	.12	.13	1.13	.0156	-0.24	50.17
Perceptual Speed	99.92	17.40	.32	.10	.10	.10	1.15	.0224	0.23	38.82
Technical	126.00	17.78	.19	.04	.03	.03	1.19	.0129	0.83	12.57
General	54.61	7.27	.36	.13	.12	.13	1.13	.0603	-0.83	50.87
All Subtests			R = .44, R^2 = .19, R^2 cor = .14, Adj R^2 = .17							

Note. N = 338; Criterion Mean = 2.46; SD = 1.21.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-99. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Home Economics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	85.98	13.32	.32	.10	.09	.10	1.06	.0264	0.31	45.46
Verbal	125.96	22.63	.31	.10	.09	.10	1.06	.0155	0.64	44.80
Math	89.51	12.45	.32	.10	.10	.10	1.06	.0288	0.00	47.51
Mechanical Crafts	169.35	22.48	.19	.03	.02	.03	1.10	.0092	1.02	14.71
Business & Clerical	135.70	18.83	.38	.15	.14	.14	1.03	.0226	-0.48	69.93
Electronics	172.90	23.01	.31	.10	.09	.09	1.06	.0151	-0.02	43.84
Health, Soc Tech	128.28	18.67	.29	.09	.08	.08	1.07	.0176	0.33	38.84
AFQT	173.21	26.06	.35	.12	.12	.12	1.04	.0150	-0.01	57.23
Perceptual Speed	99.51	16.63	.27	.08	.06	.07	1.07	.0184	0.76	33.33
Technical	125.22	18.20	.14	.02	.01	.02	1.10	.0085	1.52	8.08
General	54.56	6.76	.34	.11	.11	.11	1.05	.0558	-0.46	52.96
All Subtests			R = .43, R^2 = .18, R^2 cor = .14, Adj R^2 = .16							

Note. N = 412; Criterion Mean = 2.59; SD = 1.11.

Table A-100. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, Home Economics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	89.99	14.67	.34	.12	.11	.11	1.08	.0268	0.11	38.78
Verbal	133.05	22.98	.32	.10	.09	.10	1.09	.0160	0.39	33.46
Math	92.26	14.04	.39	.15	.14	.15	1.06	.0318	-0.42	52.24
Mechanical Crafts	175.41	24.27	.18	.03	.02	.03	1.13	.0086	1.01	9.96
Business & Clerical	138.78	18.02	.38	.14	.13	.14	1.07	.0240	-0.81	48.19
Electronics	178.91	24.02	.34	.12	.11	.12	1.08	.0165	-0.43	39.55
Health, Soc Tech	133.80	20.20	.31	.09	.08	.09	1.10	.0174	0.19	30.27
AFQT	180.38	27.76	.37	.14	.13	.13	1.07	.0153	-0.24	46.43
Perceptual Speed	98.98	15.78	.22	.05	.04	.05	1.12	.0163	0.91	15.38
Technical	129.48	19.09	.09	.01	.00	.01	1.15	.0056	1.79	2.60[c]
General	56.33	6.94	.33	.11	.10	.11	1.08	.0552	-0.59	36.61
All Subtests			R = .47, R^2 = .22, R^2 cor = .15, Adj R^2 = .19[c]							

Note. N = 295; Criterion Mean = 2.52; SD = 1.15.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-101. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Home Economics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	93.49	15.43	.29	.09	.08	.08	0.99	.0195	0.90	34.95
Verbal	138.34	23.96	.24	.06	.05	.05	1.00	.0103	1.30	22.86
Math	96.32	15.58	.34	.12	.11	.11	0.97	.0225	0.56	48.91
Mechanical Crafts	184.01	27.64	.10	.01	.00	.01	1.03	.0038	2.03	3.87[c]
Business & Clerical	143.90	19.17	.37	.13	.13	.13	0.96	.0198	-0.12	58.62
Electronics	187.11	26.72	.27	.07	.07	.07	1.00	.0105	0.77	29.74
Health, Soc Tech	139.53	21.65	.24	.06	.05	.06	1.00	.0115	1.11	23.35
AFQT	188.09	29.93	.32	.10	.10	.10	0.98	.0111	0.64	43.18
Perceptual Speed	101.68	14.69	.26	.07	.06	.07	1.00	.0184	0.85	27.78
Technical	136.41	22.21	.02	.00	-.01	.00	1.03	.0094	362.59	0.16[c]
General	58.71	7.48	.26	.07	.06	.07	1.00	.0360	0.61	27.40
All Subtests			R = .45, R^2 = .20, R^2 cor = .16, Adj R^2 = .18[c]							

Note. N = 378; Criterion Mean = 2.72; SD = 1.03.

Table A-102. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Home Economics

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	92.89	15.37	.38	.14	.14	.14	1.03	.0274	0.08	54.90
Verbal	135.92	23.74	.27	.08	.07	.07	1.07	.0129	0.88	26.68
Math	94.78	15.18	.39	.15	.14	.15	1.03	.0282	-0.05	57.15
Mechanical Crafts	181.65	26.07	.24	.06	.05	.05	1.08	.0102	0.77	19.91
Business & Clerical	144.05	20.25	.35	.12	.11	.12	1.05	.0190	-0.11	44.49
Electronics	183.52	26.64	.31	.10	.09	.09	1.06	.0130	0.24	35.40
Health, Soc Tech	138.27	21.46	.34	.11	.11	.11	1.05	.0174	0.22	41.67
AFQT	185.72	29.27	.37	.14	.13	.14	1.03	.0142	-0.00	52.94
Perceptual Speed	103.74	16.82	.21	.05	.04	.04	1.09	.0141	1.17	15.54
Technical	134.23	20.38	.14	.02	.01	.02	1.10	.0079	1.57	7.01
General	58.13	7.63	.31	.10	.09	.10	1.06	.0458	-0.03	35.79
All Subtests			R = .45, R^2 = .20, R^2 cor = .15, Adj R^2 = .18							

Note. N = 330; Criterion Mean = 2.63; SD = 1.11.

[a] r^2cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-103. ASVAB Short-Interval Validity Summary Statistics for Sophomores
Academic Year 1984-85, Drafting and Commercial Art

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	88.19	14.58	.36	.13	.11	.12	1.05	.0278	0.27	18.87
Verbal	130.98	23.89	.36	.13	.11	.13	1.05	.0171	0.47	19.35
Math	90.79	13.15	.33	.11	.09	.10	1.06	.0281	0.17	15.35
Mechanical Crafts	178.48	25.42	.33	.11	.09	.10	1.06	.0146	0.11	15.54
Business & Clerical	137.91	16.91	.41	.17	.15	.16	1.03	.0274	-1.06	25.84
Electronics	177.59	23.82	.35	.12	.10	.11	1.06	.0164	-0.19	12.39
Health, Soc Tech	133.53	21.12	.42	.18	.16	.17	1.02	.0224	-0.27	27.14
AFQT	177.20	27.62	.39	.15	.13	.14	1.04	.0157	-0.06	22.16
Perceptual Speed	100.07	16.55	.17	.03	.01	.02	1.11	.0114	1.58	3.65[c]
Technical	133.50	20.55	.31	.10	.07	.09	1.07	.0168	0.47	13.24
General	56.44	6.82	.41	.17	.15	.16	1.03	.0679	-1.11	25.83
All Subtests			R = .51, R^2 = .26, R^2 cor = .12, Adj R^2 = .20[c]							

Note. N = 128; Criterion Mean = 2.72; SD = 1.12.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-104. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Drafting and Commercial Art

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	88.17	15.36	.24	.06	.03	.05	0.98	.0154	1.49	6.45[c]
Verbal	129.62	24.61	.26	.07	.04	.06	0.98	.0106	1.47	7.99
Math	92.05	14.21	.22	.05	.02	.04	0.99	.0155	1.42	5.51
Mechanical Crafts	180.38	28.55	.22	.05	.02	.04	0.99	.0078	1.44	5.64
Business & Clerical	138.14	19.42	.24	.06	.03	.05	0.98	.0122	1.16	6.48
Electronics	180.09	26.84	.25	.06	.04	.06	0.98	.0095	1.13	7.61
Health, Soc Tech	133.79	23.49	.26	.07	.04	.06	0.98	.0110	1.37	7.80
AFQT	176.97	28.98	.27	.07	.05	.06	0.97	.0094	1.19	8.62
Perceptual Speed	102.19	17.50	.04	.00	-.03	.00	1.01	.0020	2.64	0.14[c]
Technical	134.67	22.83	.22	.05	.02	.04	0.99	.0097	1.54	5.64
General	56.82	7.66	.26	.07	.04	.06	0.98	.0336	0.94	7.70
All Subtests			R = .37, R^2 = .14, R^2 cor = -.05, Adj R^2 = .05[c]							

Note. N = 112; Criterion Mean = 2.85; SD = 1.01.

Table A-105. ASVAB Short-Interval Validity Summary Statistics for Freshman Academic Year 1984-85, Vocational Agriculture

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	84.35	12.34	.46	.21	.19	.20	0.84	.0348	-0.17	35.51
Verbal	125.45	20.36	.41	.17	.15	.16	0.86	.0189	0.39	27.14
Math	87.47	12.43	.38	.14	.12	.14	0.88	.0285	0.27	22.27
Mechanical Crafts	178.46	23.95	.33	.11	.09	.10	0.89	.0129	0.46	16.31
Business & Clerical	128.90	15.92	.44	.19	.17	.18	0.85	.0257	-0.55	31.59
Electronics	174.14	23.81	.39	.15	.14	.15	0.87	.0155	0.06	24.63
Health, Soc Tech	129.64	17.92	.42	.18	.16	.17	0.86	.0222	-0.11	29.40
AFQT	169.75	24.09	.44	.19	.17	.19	0.85	.0171	-0.13	31.86
Perceptual Speed	90.90	12.78	.37	.14	.12	.13	0.88	.0272	0.29	21.35
Technical	135.25	19.86	.26	.07	.05	.06	0.91	.0123	1.10	9.75
General	54.51	6.63	.44	.19	.17	.18	0.85	.0618	-0.60	31.53
All Subtests			R = .53, R^2 = .28, R^2 cor = .15, Adj R^2 = .22							

Note. N = 137; Criterion Mean = 2.77; SD = 0.94.

Table A-106. ASVAB Long-Interval Validity Summary Statistics for Freshman Academic Year 1985-86, Vocational Agriculture

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	84.60	13.61	.14	.02	-.01	.01	0.95	.0101	1.93	2.25[c]
Verbal	124.16	23.09	.04	.00	-.03	.01	0.96	.0017	2.58	0.18[c]
Math	88.89	13.24	.15	.52	-.01	.01	0.95	.0110	1.81	2.49[c]
Mechanical Crafts	178.79	24.74	.10	.01	-.02	.00	0.95	.0038	2.11	1.03[c]
Business & Clerical	130.02	16.67	.06	.00	-.03	.01	0.95	.0036	2.32	0.41[c]
Electronics	174.64	25.90	.10	.01	-.02	.01	0.95	.0038	2.12	1.15[c]
Health, Soc Tech	13.18	19.25	.13	.02	-.01	.01	0.95	.0062	1.98	1.67[c]
AFQT	170.36	26.61	.11	.01	-.02	.01	0.95	.0038	2.14	1.20[c]
Perceptual Speed	91.99	13.81	.00	.00	-.03	-.01	0.96	.0002	2.80	0.00[c]
Technical	134.94	19.76	.04	.00	-.03	-.01	0.96	.0021	2.50	0.21[c]
General	54.60	7.11	.07	.01	-.02	.00	0.95	.0095	2.27	0.53[c]
All Subtests			R = .30, R^2 = .09, R^2 cor = -.12, Adj R^2 = .00[c]							

Note. N = 107; Criterion Mean = 2.79; SD = 0.95.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-107. ASVAB Short-Interval Validity Summary Statistics for Sophomores
Academic Year 1984-85, Vocational Agriculture

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	91.25	16.24	.41	.17	.15	.16	0.89	.0245	0.69	25.91
Verbal	134.09	25.70	.40	.16	.14	.15	0.87	.0149	0.92	23.78
Math	95.47	15.42	.36	.13	.11	.13	0.91	.0228	0.24	19.47
Mechanical Crafts	189.42	27.54	.32	.10	.08	.09	0.92	.0112	0.80	14.37
Business & Clerical	139.14	20.64	.40	.16	.14	.16	0.89	.0190	0.28	25.03
Electronics	186.47	26.93	.33	.11	.09	.10	0.92	.0119	0.70	15.78
Health, Soc Tech	139.09	24.37	.40	.16	.14	.16	0.89	.0160	0.70	24.72
AFQT	183.25	31.54	.42	.18	.16	.17	0.88	.0127	0.55	27.58
Perceptual Speed	97.19	15.87	.19	.04	.02	.03	0.95	.0118	1.77	5.00[c]
Technical	142.07	21.40	.28	.08	.06	.07	0.94	.0125	1.14	10.62
General	58.21	8.26	.38	.14	.13	.14	0.90	.0446	0.33	21.63
All Subtests			R = .48, R^2 = .23, R^2 cor = .09, Adj R^2 = .16							

Note. N = 130; Criterion Mean = 2.92; SD = .97.

Table A-108. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Vocational Agriculture

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	89.47	16.29	.25	.06	.04	.06	0.90	.0144	1.64	8.21
Verbal	131.48	26.06	.24	.06	.03	.05	0.91	.0085	1.81	7.20
Math	93.92	15.18	.33	.11	.09	.10	0.88	.0201	1.04	14.46
Mechanical Crafts	185.13	28.89	.23	.05	.03	.04	0.91	.0073	1.57	6.56[c]
Business & Clerical	137.89	20.50	.22	.05	.02	.04	0.91	.0100	1.55	6.09[c]
Electronics	182.39	29.04	.31	.09	.07	.09	0.89	.0098	1.14	12.48
Health, Soc Tech	136.25	23.96	.25	.06	.04	.05	0.90	.0097	1.61	7.98
AFQT	180.12	31.35	.27	.07	.05	.06	0.90	.0079	1.50	9.27
Perceptual Speed	96.58	17.01	.04	.00	-.02	.00	0.93	.0023	2.70	0.22[c]
Technical	138.76	22.36	.19	.03	.01	.03	0.92	.0077	1.85	4.31[c]
General	57.17	8.44	.25	.06	.04	.05	0.90	.0271	1.38	7.76
All Subtests			R = .44, R^2 = .19, R^2 cor = .03, Adj R^2 = .12[c]							

Note. N = 122; Criterion Mean = 2.93; SD = 0.93.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-109. ASVAB Long-Interval Validity Summary Statistics for Sophomores
Academic Year 1985-86, Computer Programming

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	99.98	13.46	.41	.16	.15	.16	1.03	.0339	-0.75	45.16
Verbal	147.52	20.46	.32	.10	.09	.10	1.07	.0176	0.04	26.17
Math	102.47	14.93	.44	.19	.18	.19	1.02	.0329	-0.73	53.90
Mechanical Crafts	193.37	24.64	.19	.04	.02	.03	1.11	.0086	0.98	8.40
Business & Clerical	152.56	16.68	.46	.21	.20	.21	1.01	.0309	-2.07	60.67
Electronics	198.28	25.06	.35	.12	.11	.12	1.06	.0158	-0.50	32.58
Health, Soc Tech	149.57	19.50	.35	.12	.11	.12	1.06	.0203	-0.39	32.20
AFQT	200.70	26.05	.45	.20	.19	.20	1.01	.0193	-1.24	57.08
Perceptual Speed	106.49	13.41	.17	.03	.02	.02	1.11	.0143	1.11	6.86
Technical	142.50	19.90	.09	.01	-.01	.00	1.13	.0049	1.94	1.74[c]
General	62.03	6.34	.35	.12	.11	.12	1.06	.0618	-1.19	31.57
All Subtests			R = .53, R^2 = .28, R^2 cor = .21, Adj R^2 = .25[c]							

Note. N = 232; Criterion Mean = 2.64; SD = 1.13.

Table A-110. ASVAB Short-Interval Validity Summary Statistics for Juniors
Academic Year 1984-85, Computer Programming

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	103.66	13.09	.45	.20	.19	.20	.90	.0346	-1.08	63.88
Verbal	154.05	18.28	.34	.12	.11	.12	.94	.0189	-0.41	33.71
Math	108.11	14.99	.53	.28	.27	.27	.86	.0352	-1.30	95.63
Mechanical Crafts	200.10	26.60	.36	.13	.12	.13	.94	.0136	-0.21	37.24
Business & Clerical	160.29	15.38	.46	.21	.21	.21	.89	.0302	-2.34	68.28
Electronics	208.75	24.28	.48	.23	.22	.23	.88	.0200	-1.66	75.95
Health, Soc Tech	154.44	18.84	.46	.21	.20	.21	.89	.0244	-1.26	66.16
AFQT	209.78	24.98	.48	.23	.22	.22	.89	.0191	-1.50	72.87
Perceptual Speed	110.94	12.36	.17	.03	.02	.03	.99	.0139	0.97	7.51
Technical	147.28	21.59	.26	.07	.06	.07	.97	.0122	0.71	18.49
General	64.70	6.00	.47	.22	.21	.22	.89	.0785	-2.57	70.39
All Subtests			R = .58, R^2 = .33, R^2 cor = .28, Adj R^2 = .30							

Note. N = 252; Criterion Mean = 2.51; SD = 1.00.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

Table A-111. ASVAB Long-Interval Validity Summary Statistics for Juniors
Academic Year 1985-86, Computer Programming

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	103.94	13.51	.44	.20	.18	.19	0.93	.0336	-0.56	39.29
Verbal	153.50	19.57	.38	.14	.13	.14	0.95	.0200	-0.13	27.31
Math	108.46	14.83	.50	.25	.24	.25	0.89	.0348	-0.84	54.73
Mechanical Crafts	201.70	26.14	.19	.04	.02	.03	1.01	.0076	1.40	6.30[c]
Business & Clerical	157.79	16.97	.54	.29	.28	.29	0.87	.0329	-2.25	67.66
Electronics	209.01	25.13	.40	.16	.14	.15	0.95	.0163	-0.46	30.34
Health, Soc Tech	155.05	19.17	.39	.15	.13	.15	0.95	.0208	-0.29	28.65
AFQT	209.68	25.95	.50	.25	.24	.24	0.89	.0198	-1.21	53.78
Perceptual Speed	107.57	12.70	.38	.14	.13	.14	0.95	.0306	-0.36	27.00
Technical	148.37	21.03	.08	.01	-.01	.00	1.03	.0043	2.30	1.25[c]
General	64.45	6.39	.43	.18	.17	.18	0.93	.0689	-1.50	36.26
All Subtests			$R = .62$, $R^2 = .39$, R^2 cor = .30, Adj $R^2 = .35$[c]							

Note. N = 164; Criterion Mean = 2.93; SD = 1.03.

Table A-112. ASVAB Short-Interval Validity Summary Statistics for Seniors
Academic Year 1984-85, Computer Programming

Composite	Mean	SD	r	r^2	r^2 cor[a]	r^2 adj	SE estimate	Slope	Intercept	F[b]
Academic Ability	106.87	13.84	.43	.19	.17	.18	0.99	.0343	-0.95	35.94
Verbal	157.35	21.10	.36	.13	.11	.13	1.02	.0188	-0.25	23.60
Math	110.79	15.65	.48	.23	.22	.23	0.96	.0336	-1.01	46.58
Mechanical Crafts	208.66	27.47	.32	.10	.09	.10	1.04	.0128	0.04	17.89
Business & Clerical	162.65	18.00	.39	.15	.14	.15	1.01	.0238	-1.16	28.02
Electronics	213.28	26.70	.43	.18	.17	.18	0.99	.0176	-1.04	35.01
Health, Soc Tech	160.19	20.21	.40	.16	.14	.15	1.01	.0215	-0.74	29.20
AFQT	214.94	27.47	.45	.20	.19	.20	0.98	.0180	-1.17	40.04
Perceptual Speed	111.21	13.71	.07	.01	-.01	.00	1.10	.0059	2.05	0.85[c]
Technical	153.86	22.84	.23	.05	.04	.05	1.07	.0111	1.00	8.81
General	66.31	6.85	.40	.16	.15	.16	1.02	.0645	-1.57	30.28
All Subtests			$R = .51$, $R^2 = .26$, R^2 cor = .15, Adj $R^2 = .21$[c]							

Note. N = 158; Criterion Mean = 2.71; SD = 1.10.

[a] r^2 cor = corrected r^2 (or R^2 for All Subtests Composite) correction for expected cross-validation, Stein (1960). See Appendix C for discussion and formula used.

[b] All values significant $p < .01$, otherwise non-significant values indicated by [c].

APPENDIX B. ASVAB SUBTESTS' REGRESSION COEFFICIENTS BY COURSE AND ASVAB ADMINISTRATION SCHOOL YEAR

Table B-1. Regression Coefficients for the 10 ASVAB Subtests Predicting English Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	.0057	.0116	.0053	.0076
AR	.0106	-.0025	.0055	.0076
WK	.0097	.0149	.0147	.0115
PC	.0187	.0147	.0185	.0009
NO	.0085	.0088	.0058	-.0020
CS	.0112	.0121	.0030	.0025
AS	-.0232	-.0218	-.0215	-.0174
MK	.0349	.0432	.0320	.0340
MC	.0035	-.0040	-.0050	.0020
EI	.0069	.0031	-.0091	-.0033
Constant	-1.8531	-1.6234	-.2068	.1718
	Academic Year 1985-86[a] (long-interval validity)			
GS	.0073	.00007	.0136	
AR	.0139	-.0048	.0037	
WK	.0125	.0249	.0077	
PC	.0167	.0134	.0144	
NO	.0046	.0004	.0028	
CS	.0099	.0056	.0055	
AS	-.0203	-.0176	-.0213	
MK	.0272	.0432	.0266	
MC	-.0046	-.0028	-.0082	
EI	.0040	.0013	-.0025	
Constant	-.9541	-.7677	.2905	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-2. Regression Coefficients for the 10 ASVAB Subtests Predicting Government and Civics Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	-.0067	.0084	.0222	.0124
AR	.0227	-.0110	-.0014	.0158
WK	.0123	.0093	.0173	.0104
PC	.0299	.0094	.0077	.0031
NO	-.0049	-.0131	.0132	.0074
CS	.0119	.0246	.0002	.0018
AS	-.0027	-.0111	-.0077	-.0083
MK	.0378	.0409	.0407	.0253
MC	-.0050	-.0141	-.0036	-.0042
EI	-.0063	.0063	-.0112	.0008
Constant	-1.7057	-.1231	-1.3126	-.6799
	Academic Year 1985-86[a] (long-interval validity)			
GS	-.0085	.0043	-.0052	
AR	.0125	-.0139	.0125	
WK	-.0007	.0224	.0231	
PC	.0096	.0148	.0047	
NO	-.0055	.0157	.0064	
CS	-.0012	.0063	-.0036	
AS	.0030	-.0182	-.0110	
MK	.0297	.0498	.0384	
MC	.0093	-.0049	-.0040	
EI	.0376	-.0051	-.0067	
Constant	-1.2138	-1.2259	-.2123	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-3. Regression Coefficients for the 10 ASVAB Subtests Predicting History Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	.0100	.0124	.0086	-.0017
AR	.0192	.0026	.0088	.0094
WK	.0174	.0207	.0183	.0163
PC	.0256	.0198	.0206	.0016
NO	.0040	.0055	.0019	-.0014
CS	.0106	.0105	.0047	.0053
AS	-.0142	-.0174	-.0216	-.0021
MK	.0274	.0354	.0303	.0563
MC	-.0032	-.0038	-.0077	-.0085
EI	.0050	-.0002	.0092	.0059
Constant	-2.2244	-1.7946	-1.2018	-1.2979
	Academic Year 1985-86[a] (long-interval validity)			
GS	.0076	.0107	.0092	
AR	.0226	-.0025	.0026	
WK	.0212	.0105	.0200	
PC	.0216	.0176	.0125	
NO	.0049	.0014	.0004	
CS	.0082	.0040	.0117	
AS	-.0245	-.0216	-.0187	
MK	.0279	.0350	.0296	
MC	-.0059	-.0016	-.0137	
EI	.0031	.0045	.0097	
Constant	-1.6423	-.4319	-.6462	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-4. Regression Coefficients for the 10 ASVAB Subtests Predicting Foreign Language Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	.0011	-.0041	.0031	-.0110
AR	.0123	.0099	.0198	.0248
WK	.0190	.0010	.0108	.0128
PC	.0198	.0197	.0081	.0073
NO	.0185	.0251	.0142	-.0087
CS	.0107	.0001	.0039	.0031
AS	-.0286	-.0298	-.0259	.0070
MK	.0519	.0489	.0274	.0378
MC	-.0065	-.0027	-.0013	-.0087
EI	-.0028	-.0049	-.0058	-.0192
Constant	-2.3254	-.9325	-.3043	.2125
	Academic Year 1985-86[a] (long-interval validity)			
GS	.0018	.0002	.0261	
AR	.0196	-.0016	.0023	
WK	.0082	.0174	.0065	
PC	.0213	-.0041	-.0009	
NO	.0172	.0084	.0110	
CS	.0010	.0068	.0094	
AS	-.0275	-.0270	-.0009	
MK	.0425	.0485	.0281	
MC	-.0193	-.0022	.0016	
EI	.0038	.0066	-.0182	
Constant	-.8758	-.1307	-.5539	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-5. Regression Coefficients for the 10 ASVAB Subtests Predicting General Math Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	-.0056	-.0015	.0077	-.0061
AR	.0192	.0131	.0132	.0300
WK	.0037	-.0095	-.0216	.0108
PC	.0094	.0101	.0103	-.0139
NO	.0114	.0160	.0007	.0057
CS	.0133	.0104	.0063	.0014
AS	-.0009	-.0138	-.0177	.0028
MK	.0251	.0321	.0401	.0197
MC	-.0010	.0166	.0175	.0058
EI	.0092	.0095	-.0086	.0076
Constant	-1.6829	-1.6165	-.1105	-.9524
	Academic Year 1985-86[a] (long-interval validity)			
GS	-.0045	.0146	.0109	
AR	.0160	.0225	.0120	
WK	-.0117	-.0044	-.0070	
PC	.0090	.0083	.0162	
NO	.0110	.0088	.0151	
CS	.0079	.0079	-.0014	
AS	.0043	-.0185	-.0159	
MK	.0137	.0040	.0272	
MC	.0071	.0041	.0039	
EI	-.0034	.0002	.0046	
Constant	-.1777	-.0971	-.7676	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-6. Regression Coefficients for the 10 ASVAB Subtests Predicting Algebra Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	.0038	-.0026	.0005	.0036
AR	.0195	.0142	.0307	.0299
WK	-.0030	.0043	.0041	.0001
PC	.0230	.0045	-.0029	-.0252
NO	.0033	-.0011	.0019	.0036
CS	.0194	.0166	.0101	.0017
AS	-.0284	-.0194	-.0378	.0004
MK	.0429	.0534	.0474	.0726
MC	.0014	-.0019	.0081	-.0205
EI	.0026	-.0005	-.0085	-.0108
Constant	-1.9000	-1.3561	-.9503	-1.0841
	Academic Year 1985-86[a] (long-interval validity)			
GS	-.0007	-.0064	.0360	
AR	.0305	.0132	.0280	
WK	.0008	-.0002	-.0261	
PC	.0182	-.0065	.0098	
NO	.0031	-.0025	.0144	
CS	.0112	.0050	.0101	
AS	-.0180	-.0137	-.0152	
MK	.0449	.0666	.0215	
MC	.0012	.0082	.0007	
EI	.0010	-.0008	-.0061	
Constant	-2.1994	-1.1901	-1.6150	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table 8-7. Regression Coefficients for the 10 ASVAB Subtests Predicting Geometry Grades

Subtest	FR	SO	JR	SR
		Academic Year 1984-85[a] (short-interval validity)		
GS		.0080	-.0127	-.0172
AR		.0270	.117	.0554
WK		-.0057	.0134	.0033
PC		.0067	.0135	.0015
NO		-.0025	.0048	-.0030
CS		-.0020	-.0086	-.0007
AS		-.0114	-.0094	.0115
MK		.0486	.0492	.0213
MC		.0142	.0244	.0226
EI		-.0099	-.0067	-.0213
Constant		-1.3888	-1.9165	-1.8471
		Academic Year 1985-86[a] (long-interval validity)		
GS	-.0006	-.0002	.0058	
AR	.0264	.0052	.0145	
WK	-.0009	.0207	-.0102	
PC	.0180	.0063	.0114	
NO	.0112	-.0118	.0036	
CS	.0004	.0038	-.0064	
AS	-.0182	-.0128	.0053	
MK	.0444	.0643	.0436	
MC	.0019	.0107	.03525	
EI	.0136	.0098	-.0246	
Constant	-2.3920	-2.4732	-1.8398	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-8. Regression Coefficients for the 10 ASVAB Subtests Predicting Calculus Grades

Subtest	FR	SO	JR	SR
		Academic Year 1984-85[a] (short-interval validity)		
GS				.0204
AR				.0249
WK				-.0342
PC				.0121
NO				-.0254
CS				.0085
AS				-.0284
MK				.0559
MC				.0131
EI				.0018
Constant				-.3699
		Academic Year 1985-86[a] (long-interval validity)		
GS			.0039	
AR			.0007	
WK			.0011	
PC			.0086	
NO			.0291	
CS			-.0184	
AS			-.0037	
MK			.0868	
MC			-.0059	
EI			-.0219	
Constant			-2.3264	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.
[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-9. Regression Coefficients for the 10 ASVAB Subtests Predicting General Science Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	.0113	.0130	.0147	.0126
AR	.0121	.0025	.0148	-.0245
WK	.0130	.0003	.0088	.0204
PC	.0161	.0186	-.0022	-.0008
NO	.0094	.0103	-.0008	.0106
CS	.0144	.0223	.0050	-.0083
AS	-.0152	-.0186	-.0178	-.0094
MK	.0368	.0295	.0231	.0217
MC	-.0081	.0056	.0109	.0183
EI	.0169	-.0013	-.0171	.0056
Constant	-2.6501	-1.7545	.1652	.2426
	Academic Year 1985-86[a] (long-interval validity)			
GS	.0220	.0342	.0170	
AR	.0369	-.0213	.0142	
WK	-.0114	-.0221	.0121	
PC	.0141	.0195	.0185	
NO	-.0042	.0192	.0114	
CS	.0164	-.0052	-.0041	
AS	-.0140	.0119	-.0113	
MK	-.0097	.0336	.0097	
MC	.00419	-.0124	-.0084	
EI	.0199	.0010	.0049	
Constant	-1.0936	-.4466	-.5519	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-10. Regression Coefficients for the 10 ASVAB Subtests Predicting Biology Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	.0062	.0116	.0026	-.0014
AR	.0141	.0103	.0022	-.0040
WK	.0056	.0045	.0079	.0209
PC	.0135	.0145	.0038	-.0003
NO	.0109	.0154	.0182	-.0068
CS	.0160	.0068	-.0009	.0060
AS	-.0257	-.0215	-.0155	-.0132
MK	.0207	.0421	.0380	.0479
MC	.0297	-.0007	.0029	.0087
EI	.0079	.0032	-.0006	.0064
Constant	-2.4979	-2.0042	-1.6950	-.7072
	Academic Year 1985-86[a] (long-interval validity)			
GS	.0050	.0055	.0155	
AR	.0126	-.0014	-.0274	
WK	.0168	.0145	.0163	
PC	.0169	.0077	.0291	
NO	.0069	.0092	.0276	
CS	.0062	.0066	-.0071	
AS	-.0277	-.0089	.0024	
MK	.0292	.0628	.0677	
MC	.0014	-.0080	-.0093	
EI	.0086	-.0183	-.0219	
Constant	-1.02041	-1.2652	-2.3078	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-11. Regression Coefficients for the 10 ASVAB Subtests Predicting Physics Grades

Subtest	FR	SO	JR	SR
		Academic Year 1984-85[a] (short-interval validity)		
GS				.0188
AR				.0313
WK				-.0168
PC				.0150
NO				.0008
CS				.0005
AS				-.0282
MK				.0354
MC				.0018
EI				-.0016
Constant				-.8961
		Academic Year 1985-86[a] (long-interval validity)		
GS			-.0134	
AR			.0092	
WK			.0098	
PC			.0063	
NO			.0186	
CS			.0111	
AS			-.0063	
MK			.0372	
MC			.0029	
EI			-.0133	
Constant			-.7236	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with n $\geq$ 100.

Table B-12. Regression Coefficients for the 10 ASVAB Subtests Predicting Chemistry Grades

Subtest	FR	SO	JR	SR
		Academic Year 1984-85[a] (short-interval validity)		
GS		-.0220	.0003	.0017
AR		.0161	-.0102	.0220
WK		.0193	-.0030	-.0060
PC		.0080	.0153	-.0010
NO		-.0241	.0121	.0038
CS		.0211	-.0020	.0001
AS		-.0014	-.0101	.0097
MK		.0111	.0620	.0543
MC		.0084	.0029	-.0114
EI		.0185	-.0191	-.0070
Constant		.0305	-1.7294	-.7725
		Academic Year 1985-86[a] (long-interval validity)		
GS	.0100	.0112	.0112	
AR	.0379	.0180	.0074	
WK	-.0103	.0074	.0164	
PC	.0157	-.0003	-.0063	
NO	-.0117	-.0168	-.0004	
CS	.0249	.0180	.0047	
AS	-.0429	-.0308	-.0321	
MK	.0426	.0360	.0565	
MC	-.0011	-.0096	.0053	
EI	.0132	.0194	-.0107	
Constant	-1.6658	-.5675	-.8139	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-13. Regression Coefficients for the 10 ASVAB Subtests Predicting Secretary and Office Education Grades

Subtest	FR	SO	JR	SR
Academic Year 1984-85[a] (short-interval validity)				
GS				.0102
AR				.0184
WK				-.0054
PC				.0196
NO				.0307
CS				-.0196
AS				-.0160
MK				.0138
MC				-.0031
EI				.0023
Constant				.2250
Academic Year 1985-86[a] (long-interval validity)				
GS		.0127	.0042	
AR		.0184	-.0076	
WK		.0163	.0034	
PC		.0144	.0083	
NO		-.0107	-.0013	
CS		.0213	.0202	
AS		-.0215	-.0107	
MK		.0445	.0426	
MC		.0065	.0188	
EI		-.0186	-.0264	
Constant		-1.4963	.0893	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-14. Regression Coefficients for the 10 ASVAB Subtests Predicting Accounting/Bookkeeping Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS			.0166	.0016
AR			.0266	.0431
WK			.0036	.0099
PC			.0363	.0032
NO			-.0050	-.0021
CS			.0173	.0225
AS			-.0579	-.0110
MK			.0269	.0121
MC			.0128	-.0028
EI			-.0052	-.0137
Constant			-1.1925	-.7361
	Academic Year 1985-86[a] (long-interval validity)			
GS		.0155	.0295	
AR		.0156	-.0184	
WK		.0119	-.0127	
PC		.0097	.0118	
NO		.0018	.0165	
CS		.0093	.0221	
AS		-.0088	-.0066	
MK		.0442	.0746	
MC		-.0023	-.0075	
EI		-.0173	.0226	
Constant		-1.3714	-1.8510	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-15. Regression Coefficients for the 10 ASVAB Subtests Predicting Typing and Word Processing Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	.0123	-.0028	-.0095	.0152
AR	.0064	.0122	.0120	.0225
WK	.0126	.0209	.0116	.0050
PC	.0178	.0079	.0262	.0179
NO	.0050	.0074	.0192	.0087
CS	.0295	.0148	.0063	.0051
AS	-.0175	-.0278	-.0261	-.0097
MK	.0274	.0395	.0190	.0179
MC	.0097	.0063	.0168	-.0099
EI	-.0003	-.0021	-.0095	-.0196
Constant	-2.6240	-1.4106	-.9695	-.0423
	Academic Year 1985-86[a] (long-interval validity)			
GS	-.0054	-.0194	-.0051	
AR	.0044	.0053	.0273	
WK	.0168	.0218	.0093	
PC	.0126	.0197	.0193	
NO	.0023	-.0075	.0211	
CS	.0162	.0035	.0003	
AS	-.0251	-.0083	-.0202	
MK	.0375	.0426	.0139	
MC	.0207	.0054	.0138	
EI	.0044	.0005	-.0127	
Constant	-1.5775	-.4288	-.7287	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-16. Regression Coefficients for the 10 ASVAB Subtests Predicting Business Math Grades

Subtest	FR	SO	JR	SR
		Academic Year 1984-85[a] (short-interval Validity)		
GS		.0044		
AR		.0246		
WK		-.0009		
PC		-.0153		
NO		-.0027		
CS		.0061		
AS		.0065		
MK		.0071		
MC		.0032		
EI		.0062		
Constant		.2925		
		Academic Year 1985-86[a] (long-interval validity)		
GS	-.0081			
AR	.0568			
WK	-.0177			
PC	-.0004			
NO	-.0124			
CS	.0252			
AS	.0037			
MK	.0162			
MC	.0067			
EI	-.0202			
Constant	-.4719			

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-17. Regression Coefficients for the 10 ASVAB Subtests Predicting Shop Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	.0167	.0027	.0287	.0185
AR	.0192	-.0119	-.0044	.0328
WK	.0048	-.0114	-.0212	.0003
PC	-.0027	.0002	.0028	-.0110
NO	.0065	.0078	.0031	.0027
CS	.0296	.0047	.0146	-.0053
AS	.0014	.0027	-.0166	.0043
MK	.0122	.0547	-.0052	-.0171
MC	-.0055	.0194	.0179	-.0090
EI	.0139	.0150	.0105	.0306
Constant	-1.6136	-1.6534	1.0698	.2719
	Academic Year 1985-86[a] (long-interval validity)			
GS	-.0086	.0053	.0091	
AR	.0266	-.0146	-.0151	
WK	.0168	-.0419	-.0232	
PC	-.0061	.0022	-.0238	
NO	-.0071	.0011	-.0040	
CS	.0041	.0052	.0260	
AS	.0072	.0346	.0101	
MK	.0129	.0636	.0411	
MC	.0001	-.0055	.0485	
EI	.0300	-.0044	-.0221	
Constant	-.09183	.1330	-.0197	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-18. Regression Coefficients for the 10 ASVAB Subtests Predicting Home Economics Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	.0207	.0079	.0186	-.0163
AR	.0066	.0107	.0116	.0471
WK	.0012	.0058	-.0085	.0370
PC	.0159	.0028	.0188	-.0109
NO	.0116	.0195	.0072	-.0061
CS	.0261	.0041	.0043	.0117
AS	-.0163	-.0293	-.0307	-.0015
MK	.0283	.0331	.0401	.0148
MC	-.0005	.0178	.0003	-.0075
EI	.0151	-.0065	-.0016	-.0169
Constant	-2.0237	-.6585	-.3230	.0589
	Academic Year 1985-86[a] (long-interval validity)			
GS	.0078	.0066	-.0007	
AR	.0047	-.0053	.0037	
WK	.0182	.0138	.0090	
PC	.0077	.0074	.0044	
NO	.0059	.0121	.0081	
CS	.0194	.0070	.0097	
AS	-.0117	-.0309	-.0295	
MK	.0131	.0375	.0380	
MC	.0030	.0062	.0018	
EI	.0098	.0097	.0025	
Constant	-.8874	-.3742	.3783	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-19. Regression Coefficients for the 10 ASVAB Subtests Predicting Drafting and Commercial Arts Grades

Subtest	FR	SO	JR	SR
		Academic Year 1984-85[a] (short-interval validity)		
GS		.0092		
AR		-.0073		
WK		.0175		
PC		.0005		
NO		-.0051		
CS		.0234		
AS		-.0213		
MK		.0240		
MC		.0525		
EI		-.0104		
Constant		-1.1086		
		Academic Year 1985-86[a] (long-interval validity)		
GS		-.0032		
AR		-.0227		
WK		.0356		
PC		-.0133		
NO		-.0055		
CS		.00003		
AS		-.0108		
MK		.0365		
MC		.0151		
EI		.0071		
Constant		1.1477		

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-20. Regression Coefficients for the 10 ASVAB Subtests Predicting Vocational Agriculture Grades

Subtest	FR	SO	JR	SR
	Academic Year 1984-85[a] (short-interval validity)			
GS	-.0026	-.0123		
AR	.0319	.00004		
WK	.0178	.0198		
PC	.0235	.0278		
NO	.0112	-.0191		
CS	.0179	.0178		
AS	-.0237	.0072		
MK	-.0148	.0153		
MC	.0082	.0040		
EI	.0175	-.0157		
Constant	-.8732	.9437		
	Academic Year 1985-86[a] (long-interval validity)			
GS	.7349	.0380		
AR	.0053	.0221		
WK	.8958	-.0293		
PC	.5312	.0018		
NO	.2417	-.0139		
CS	.4280	-.0057		
AS	.6084	-.0058		
MK	.3822	.0339		
MC	.9396	.0007		
EI	.8208	-.0138		
Constant	.0223	1.5711		

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

Table B-21. Regression Coefficients for the 10 ASVAB Subtests Predicting Computer Programming Grades

Subtest	FR	SO	JR	SR
		Academic Year 1984-85[a] (short-interval validity)		
GS			-.0010	.0060
AR			.0149	.0293
WK			-.0245	-.0105
PC			.0278	.0109
NO			.0054	-.0172
CS			.0111	.0091
AS			-.0096	.0234
MK			.0447	.0423
MC			.0146	-.0229
EI			.0087	-.0056
Constant			-2.4527	-.8293
		Academic Year 1985-86[a] (long-interval validity)		
GS		-.0234	-.0209	
AR		.0060	.00004	
WK		.0551	.0209	
PC		-.0022	.0268	
NO		-.0059	.0345	
CS		.0125	.0011	
AS		-.0235	-.0022	
MK		.0530	.0536	
MC		-.0044	-.0021	
EI		.0069	-.0136	
Constant		-1.1909	-2.4426	

Note. FR = Freshman, SO = Sophomore, JR = Junior, SR = Senior.

[a]Regression coefficients computed only for grade level/courses with $n \geq 100$.

APPENDIX C: ADJUSTMENTS TO THE SQUARED CORRELATIONS AND ESTIMATES OF SQUARED CROSS-VALIDITY COEFFICIENTS

In the main body of this report the primary statistics of interest are the bivariate and multiple correlation coefficients which express the magnitude of the relationship between the predictor variable (ASVAB score) and the criterion variable (course grade). Those correlation coefficients, however, are based on the sample which was available for the study, and are not necessarily representative of the correlation coefficients which would have been obtained with some other sample or with the entire population of interest (i.e., all high school students nationwide taking the course of interest). In order to denote the magnitude of the correlations which might have been obtained under different circumstances, two additional estimates of correlation are presented in the tables of Appendix A.

The first of the two additional estimates is denoted the adjusted R square. Whenever a correlation coefficient is calculated for a sample, there is some tendency for the result to overestimate the true or population value of the correlation coefficient. This overestimation is largely due to the underestimation of the sums of squares of the deviations of the standard scores from their mean. The underestimation is a consequence of having to use the sample mean, rather than the population mean, as the basis for establishing the point from which to determine the deviations. Consequently, when the prediction equation is applied to the population as a whole, or to another sample based on the population, and the correlation coefficient between the predicted and the observed scores is determined, the value will generally be observed to be less than the value reported for the sample on the basis of which the prediction equation was determined. The extent of the difference varies with the magnitude of the correlation, with the size of the sample, and with the number of predictor variables. The difference increases with smaller samples and with increasing numbers of predictor variables. In most of the equations of interest in the present research, the samples are large enough that the adjustment is inconsequential, especially with univariate regression; but in the case of multivariate regressions with 10 predictors and some of the smaller samples (less than 300), the adjustment does show a smaller value.

The adjustment is properly determined by the computation of an infinite series (Olkin & Pratt, 1958). However, since the series converges very rapidly, an excellent approximation may be made by using only the first term of the series. The analytical package used for the statistical analysis of the data in this study, SPSS/PC+ V2.0 (Norusis, 1988), provides such an approximation using formula 1:

$$R^2adj = R^2 - \frac{P(1 - R^2)}{N - P - 1,} \qquad (1)$$

where R^2adj = adjusted R square
R^2 = R square
P = the number of predictors
N = the sample size.

An additional value is shown: the estimation of the squared cross-validity coefficient--the value which would be obtained if an identical regression were to be performed with a different sample. Stein's estimator is used to determine the value of that coefficient. Stein's estimator (1960), cited in Kennedy (1988), is recommended by Kennedy for use when subset regression is employed, usually in the context of stepwise regression. Subset regression designates a regression in which a number of predictors are available, but only a subset of them will be used in the regression equation. Stein's estimator is most appropriate when there is no guarantee that the particular predictors used in a regression would again be selected for use when an identical regression was employed with another sample. Stein's estimator is calculated by formula 2:

$$R^2est = 1 - \frac{(N - 1)(N - 2)(N + 1)(1 - R^2)}{(N - P - 1)(N - P - 2)N,} \qquad (2)$$

where

R^2est = Stein's estimator
R^2 = R square.
P = the number of predictors
N = the sample size

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